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The Ethnoarchaeology of coffee production and consumption: three case studies from Southwest Ethiopia (Kafecho, Majangir and Oromo)

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Etnoarqueología de la producción y consumo de café: tres casos de estudio del sudoeste de Etiopía (Kafecho, Majangir y Oromo)

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NOTE ON TRANSLITERATION

The absence of commonly accepted mode for Ethiopian names and words has resulted in unavoidable disparity in the works of different scholars and thus has bred substantial perplexity. In this dissertation, I have employed the transliteration system suggested by the editorial team of Encyclopaedia Aethiopica(EAE). The EAE general rule executes “the one sound-one sign principle”. Even then, the system best works for vocabularies that come from Ethio-Semietic languages.

The Latin-based orthography has been in use by the Oromo and the Kafecho, and has recently gained acceptance among the Majangir. For this dissertation dealing with these communities speaking Cushitic, Omotic and Nilo-Saharan languages, without exact correspondence in Ethio-Semietic languages, a separate treatment is suggested by EAE editorial team: introducing the new spelling in brackets and use the EAE thereafter. Thus, I have decided to consistently use this conventional approach for proper nouns from these languages. In places where there are quotations, I have opted to indicate the transcription in the native language and to provide the English equivalent.

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CHAPTER 1

INTRODUCTION

1.1. Subsistence Strategies and the Neolithic Revolution

The four subsistence strategies known to anthropologists consist of foraging, pastoralism, horticulture and agriculture (Bennet 1989). Currently, it is taken for granted that these four strategies are not so precise (Smith 2001b:26). Evidently, the traditional subsistence strategies of people in different parts of the world pose questions to the broad-scale application of a single terminology to label to one of the four strategies pervasively known in anthropology. For example, the Nukak community in Colombia subsist on multitude strategies (hunting, gathering wild and 'manipulated' plant species, exploitation of seasonal resources, fishing, collection of honey, and finally cultivation in gardens) (Politis 1996). Besides, people may swing from one subsistence strategy to another or practice several concurrently. This holds true of the Majangir, a Nilo-Saharan people in southwest Ethiopia, who have traditionally moved between horticulture and foraging (see Stauder 1968; 1971).

Amongst the four subsistence strategies, the emergence of agriculture is a principal topic in the study of prehistory although different set of explanations related to the Neolithic have remained deductive and are still restrained by available data (Neumann 2005:249; Smith 2001a:215). In a broader perspective, the transition from foraging to strategies that rely on domestic plants and animals occurred 10,000 to 3,500 years ago independently in many parts of the world (Green and Moor 2010; Rudebeck 2000; Smith 1995a). The onset of domestication of plants and animals underpinned the inception of agricultural systems and hence, it is considered as a turning point in the cultural history of humanity (Fuller 2007; Mannion 1999; Redding 1988; Weisdorf 2005). Mannion also draws attention to the difficult nature of elucidating domestication and such related terms as agriculture[1] and cultivation. Concomitant to this, Harris (1996)

[1]Mannion (1995) considers materialism and environmentalism as major factors for the beginning of agriculture. In his later work, he presented a summary of the views adding another driving force, which he referred as "dump heap" hypothesis that stresses the growing co-dependence between specific plants, animals and human activity. The process might have led to plant domestication on condition that food procurement was accompanied by innovation that would help the process of procurement. Yet, the hypothesis appears to be simpler than the reality (see Mannion 1999).

explains the presence of little agreement over the precise meaning of the terms. However, the term "food production" is described as tantamount to "agriculture" by Braidwood (1952; 1960).

The transition from hunter-gatherer economies to settled agriculture (the 'Neolithic revolution') is one of the most important events in human history. Different scholars (for example, Diamond 2002; Diamond and Bellwood 2003) hypothesize that this transition occurred separately in different parts of the world between c. 10–12,000 ya and 3000–4000 ya. Domestication is a result of selection processes, although the intentional or unintentional nature of the selection, itself, is a debated subject (See Fuller *et al.* 2010; Gepts 2004; Harlan *et al*. 1973; Zohary *et al.* 1998). The notion of unconscious selection is summed up well in the work of Jared Diamond (2002:700) as follows:

> Food production could not possibly have arisen through a conscious decision, because the world's first farmers had around them no model of farming to observe, hence they could not have known that there was a goal of domestication to strive for, and could not have guessed the consequences that domestication would bring for them. If they had actually foreseen the consequences, they would surely have outlawed the first steps towards domestication, because the archaeological and ethnographic record throughout the world shows that the transition from hunting and gathering to farming eventually resulted in more work, lower adult stature, worse nutritional condition and heavier disease burdens.

Despite the presence of disparities over the process of selection, unconscious selection is generally presumed to be the driver of much of early domestication. The process of moving plants from the wild into synthetic environments results in increased fitness of phenotypes with low fitness in the natural environment (see Fuller *et al*. 2010). In other words, domesticated crops have reduced fitness, or in some instances, failure to survive outside of cultivation (Allaby *et al*. 2008; Gepts 2004; Meyer *et al*. 2012; Pickersgill 2007; Purugganan and Fuller 2011). In conscious selection, however, humans select desirable phenotypes, while neglecting or removing less desirable phenotypes until their occurrence dwindles in the population (Zohary 2004). This process of selection leads to improved adaptation of plant and animals to cultivation or rearing and utilization by humans. Human management, including planting and harvesting techniques, creates further selection pressure (Fuller *et al*. 2010; Meyer *et al.* 2012).

The process of domestication, alongside the associated emergence of agriculture, has been equated with such fundamental developments in human evolution as symbolic communication, tool use and bipedalism. It involves a relationship between human and target plant or animal population with human control over their reproduction, nourishment, distribution, protection and movement albeit restricted to animals (Bokonyi 1989; Clutton-Brock 1994; Ducos 1978; Hemmer 1990; Zeder 2006b). An important concept, to be cited here, is the notion of intentionality, which involves deliberate human interference in the life cycle of target plant and animal population. In due courses, humans take responsibility of caring for domesticates (plants/animals) primarily with the intent of meeting their needs which, in turn, results in a remarkably indispensable change in socio-economic organization, and eventually domesticates become objects of ownership (Ducos 1978; Ingold 1996). This "anthropocentric" approach of defining domestication has been reproached for portraying domesticates as "passive objects" in the entire process of domestication. Opponents of the anthropocentric approach hint a large-scale improvement of reproductive fitness and expanded ranges as advantages domesticates could obtain in the process (O 'Connor 1997). This view is further augmented by a scientific stance of evolutionary perspective, which draws attention to extant similarity in terms of the nature of relationships between humans and domesticates, and mutualistic co-existence in an ecosystem (Moray 1994). The role of purposeful human intentionality, however, declines as one moves from a rather mutualistic perspective to views that accentuate on domesticates. In light of this, an extreme position of the spectrum turn the advantage in favor of domesticates, which are viewed as using humans for their own evolutionary advantage (Rindos 1984). The three axes of variation (Figure 1.1) presented by Zeder (2006b:106) show that definitions of domestication that tend to favor the balance of power in the link to humans emphasize human intentionality along with socio-economic impacts of domestication. In a similar fashion, Zeder underscores that definitions that incline the balance of power to domesticates undermining the role of human intentionality in the domestication process and stresses its biological impacts on domesticates.

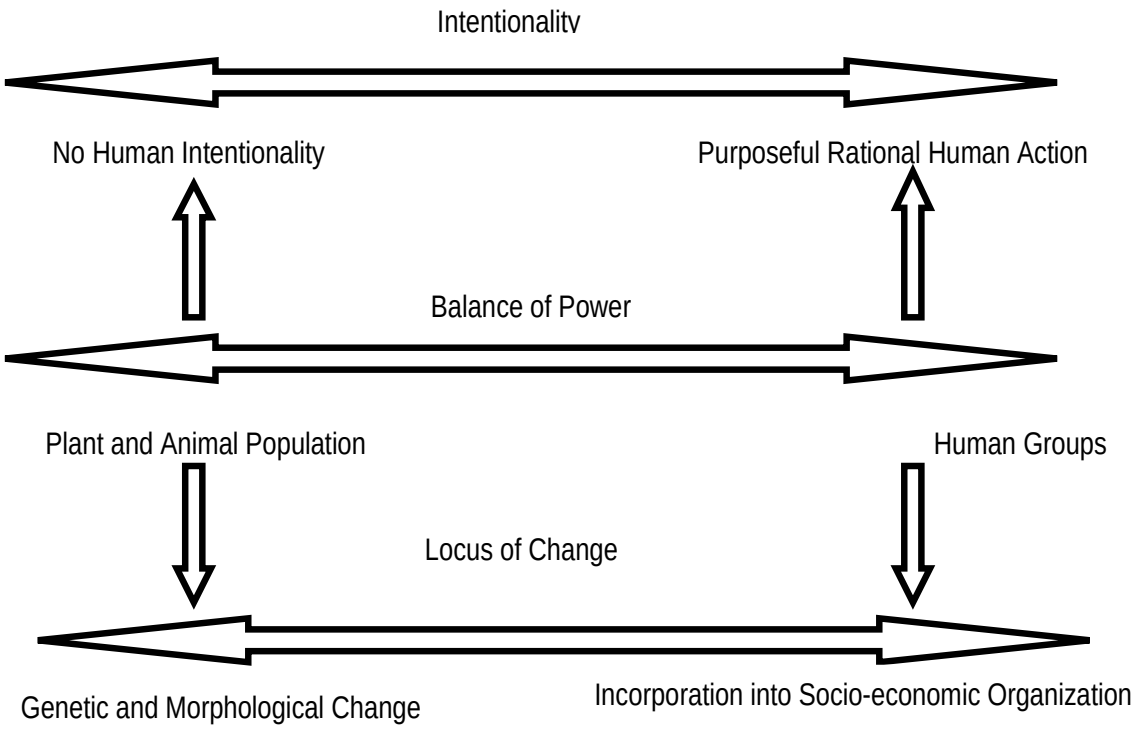

Figure 1.1. The interrelations between intentionality, balance of power, and locus of change in the process of domestication (after Zeder 2006b:106).

Another inconclusive, yet important, concept in approaches defining domestication has been suggested by Zeder (2006a) focusing on the prerequisite that domesticates exhibit evidence of morphological or even genetic change. In support of this proposition, Uerpmann (1996) provides a further detail on the emphasis given to genetic change and its phenotypic expressions as a special concern of researchers working on plant domestication, particularly the domestication of large seeded annuals, where human intervention results in reasonably rapid genetic changes with noticeable phenotypic expressions (Harris 1996; Rindos 1984). There is, in fact, variation in the rate and degree of genetic alteration between plants and animals in general and among diverse plant species in particular. In view of this, Zeder (2006a) underscores that genetic driven morphological change occurring in animals is slow and yet difficult to directly correlate it with the process of domestication. This view, according to Smith (2006), also holds true for plant domestication, particularly for such perennial plants as root crops that can be reproduced through vegetative propagation, or very long-lived tree crops characterized by delayed genetic and morphological alteration.

Markers of domestication process differ depending on the biology of a given domesticate and its association with humans (Zeder 2006b:106-107). In identifying plant species that have undergone domestication, an array of markers have been suggested by scholars dealing with this quest (for instance, Blummer and Bryne 1991; Harlan 1973; Smith 2006). Accordingly, they illustrate that human planting and harvesting results in morphological impacts of the domestication of annuals and the process results in increased seed size, thinner seed coats and indehiscent seedpods. Besides, intentional selection in annual plants results in larger fruit size in the process of domestication (Piperno and Pearsall 1998; Piperno 2006; Smith 2006) and the loss of chemical defenses against herbivores or changes in sugar and starch in root fragments manipulated for their desired qualities(Heiser 1988).

Bennet (1989:1-2) further explicates that domesticated species have undergone alteration through human selection to the extent that their survival relies on human interference. They also have features that discern them from their wild progenitors. The common traits of domesticated plants explained by Bennet include (a) increased size of edible parts, (b) increased palatability, (c) decreased armament (mechanical protection), (d) absence of dormancy, (e) decreased toxicity[2], (f) abbreviated flowering, (g) synchronous phenology, (h) non-shattering fruits and (i) thinner seed coats.

The process of domestication cannot be labeled either as biological or cultural, but could be viewed as a process that blends a form of "biological mutualism" transformed by a well-developed human ability to result in behavioral change by way of learning and cultural transformation. Consequently, explanation on domestication is coherent when it stresses on the developing association between humans and target domesticate (plant/animal) as a nexus between biology and culture (Zeder 2006b). If one is to examine cultural developments in human existence, therefore, the emergence of agriculture becomes unavoidably momentous. In light of this, the central questions as to why and where the transformation from foraging to agriculture has taken place have been one of the kernels of scientific pursuit. For instance, Alphonse de Candolle's publication, under the rubric *Origin of cultivated plants* (published in 1882), was a valuable work that pieces data from archaeology, ethnography, history, linguistics, plant geography and natural variation (De Candolle 2006).Yet, it was the work of a Russian botanist, Nikolai Vavilov which first brought the wealth

[2] It should be noted, here, that human utilization of plants varies depending on the type of target plant. As regards this, Dincauze (2000:396) outlines human exploitation of plants for food, flavoring, hallucinogens and medication, and that people have discovered ways to convert toxic plants into nutritious food.

of crops in Africa[3] into the fore (Vavilov1926; 1951; 1992). He suggested that areas with high diversity of crops (i.e. where both domestic and their wild relatives are found) likely correspond to centers of domestication (Vavilov 1992), a presumption considered by Harris (1996) as "simplistic and flawed." Nonetheless, one of the most significant contributions of Vavilov's work is the documentation of the diversity of cultivated plants based on which he proposed the East African Highlands as potential cradle of agriculture and Ethiopia as one of the eight centers[4] of origin (1951). In fact, Vavilov's theories were either refuted (ex, Harlan 1971) or questioned in subsequent decades (Murdock 1959; Neumann 2005:254). Nonetheless, eight of the plant species listed by Vavilov are commonly accepted as Ethiopian domesticates (Barnett 1999b:60; Edwards 1991).

1.2. The Origins of Plant Domestication in Ethiopia

The cultigens[5] of African origin that irrefutably appear to be evidently of Ethiopian origin comprise (a) *ŧef* (*Eragrostis tef*), a major cereal in Ethiopia, (b) *noog* (*Guizotia abyssinica*), a chief oil plant, (c) *ensät* (*Ensete ventricosum*), starchy stem used as a staple food (Edwards 1991; Fuller and Harvey 2006:225; Harlan 1969; Mitchell 2005:36; Neumann 2005), (d) *gesho* (beer hops) (*Rhamnus prinoides L'Herit*), a plant used in preparation of a local beer (*ŧälla*), (e) *kosso* (*Hygenia abyssinica-vermi-fuge*), (f) *ƈat/khat* (*Catha edulis*), a mild narcotic, chewed fresh and (g) *bunna* (*Coffea arabica*) which is brewed or chewed (Harlan 1969). In his later work, Harlan produced a comprehensive map for ten African domesticates in which he included *Musa ensete* and finger millet (*Elusine coracana*) to be initially from East Africa (Harlan 1971: 174:468-474; 1992:59-70).

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[3] Africa attained a high degree of attention for its value in the study of the origins of food production following Jack Harlan's work (Harlan *et al*. 1976). In the decades that followed (Brandt 1984; Harlan 1992, 1995; Shaw *et al*. 1993; Smith 1998b), most archaeologists relied on either Direct Historical or archaeological data, but not on botanical remains.

[4] Vavilov's eight centers of origin are China, India, Indochina, central Asia, Near East, Mediterranean, Ethiopia, Mesoamerica, and northeastern South America (1951). He further postulated that the wide variety of highland Ethiopian cultivated cereal resources should be equated with a long-time scale of domestication. His hypothesis would influence a generation of botanists (Harris 1990), although his omission of some centers of origin (for ex, North America and Amazon) was inaccurate. Even more, his centers of origin were rectified as centers of diversity and centers of longstanding agricultural practice that may or may not represent a center of origin or a non-center (see Harlan 1971).

[5] The distinction between a cultigen and a domesticate is that the former represent a wild plant species endured for utilization(Cowan and Watson 1992:4) while the later relies up on human interference for its growth and reproduction (Cowan and Watson 1992; Crabtree and Campana 2001).

Table 1.1. Plant cultigens of Ethiopian domesticates.

Name of the plant	Scientific name	Description
Tef	*Eragrostis tef* (Zucc)Trotter	A very small grain grown as a source of human food. It is used to prepare unleavened bread (*injära*) (Gedef 2009; 2010; Ingram and Doyle 2003).
Ensät *(*false banana*)*	*Ensete ventricosum* (welew.)Cheesman	The cultigen used to grow over a wide geographical zone though currently the southwest highlands of Ethiopia is the chief center of production (BOSTID 1996; Brandt *et al*. 1997; Hildebrand 2003a).
Noog	*Guizota abyssinica*(L.f.) cass	An oil plant cultivated in highland climate (BOSTID 1996; Hiruy 2004).
Ajaa	*Avena abyssinca*	A highly nutritious grain well adapted to highlands (BOSTID1996), commonly intercropped with barley, and is remarkably stands weed (Edwards 1991; Finneran 2007).
Dagussa (finger millet)	*Elusine coracana* (L.) Gaertin	A highland crop used to prepare porridge and beer (Finneran 2007; Tsehay 2012).
Bunna(coffee)	*Coffea arabica L.*	A tropical crop that bears beans either brewed or chewed (see Harlan 1969; Wellman 1961).
Cat/khat	*Catha edulis*(*vahl*)	It grows in hot lowlands and the cool highlands (Amare and Krikorian 1973). It is a mild narcotic stimulant (Harlan 1969; Huffnagel 1961). It is widely consumed today alongside with other addictive stimulants, tobacco and coffee.
Gesho(beer-hops)	*Rhamnus prinoides(L'Herit)*	A small fruit bearing shrub tree that grows at medium and high altitude, mostly near streams and forest margins. Its common use, in Ethiopia, is in brewing two local drinks, a mead called *täj* (Pankhurst 1968), and *tälla* (Hermann 2010).

Yabäsha gomän (Ethiopian mustard)	*Brassica carinata A. Braun*	Its cultivation is believed to have begun in the Ethiopian highlands about 4000 years B.C. (Nigusse and Becker 2002; Schippers 2002). It is cultivated as an oil crop and leafy vegetable in the Ethiopian highlands at altitudes between 1500 and 2600 masl (Muthoni 2010; Zemede 1997).
Kärbe (Abyssinian myrrh)	*Commiphera abyssinica*	Resin yielding thorny tree species (Edwards 1991; Edwards *et al*. 1995).
Kosso (African redwood/hagenia)	*Hagenia abbyssinica (*willd)	A highland tree traditionally used to remove intestinal worm (Pankhurst and Asrat 1990:104).
Sälit (sesame)	*Seasamum indicum L.*	One of the oldest oil seed plants growing in tropical and sub-tropical environments(Ram *et al*. 1990; Wei *et al*. 2011)
Qulqwal	*Euphorbia candelabrum*	A thorny plant that yields luscious edible fruits. Pankhurst and Asrat (1990) reported its past use as traditional Ethiopian medicine, particularly mixed with pure honey and its sap was used as a purgative to cure syphilis, and when mixed with other medicinal plants to treat the symptoms of leprosy.
Ancote	*Coccina abyssinca (Lam.) cogn.*	Edible tubers (Edwards 1991; Edwards *et al*. 1995).
Gulo (castor oil plant)	*Ricinus communis L.*	An oil seed (Edwards 1991; Edwards *et al*. 1995).

The attempts to address the question of early plant food production in Africa was possible at only few sites where evidence on such developments were recovered from a relatively earlier dates. Nevertheless, for most of the sites in the continent, acquisition of archaeo-botanical data either suffers from poor sampling or is characterized by circumstantial and accidental occurrence of such evidence (Neumann 2005). In light of this, early research on the origins of prehistoric agriculture in Ethiopia paid a great deal of attention to the enquiry whether agriculture developed as autochthonous influences instigated by local dynamics or allochthonous influences resulting from diffusion (see Bellwood 2005; Fuller *et al.* 2011; Harrower *et al.*2010; Hildebrand 2003b; Neumann 2005). Proponents of the diffusionist idea attribute the origins of Ethiopian agriculture to a spread of Neolithic crops from Arabia, or Egypt or from South Asia. The major proponents of this view include Dogget (1965; 1970), Sauer (1952), Seligman (1966), and Murdock (1959).

Christopher Ehret (1979; 1984), who often makes use of historical/linguistic data, is the forbearer of the notion of indigenous origin of the cultivation economies in Ethiopia. The diverse views along with a set of evidence provided to argue for or against these postulations and other alternate explanations are painstakingly presented in chapter two of the dissertation.

My motivation for ethnoarchaeology in southwest Ethiopia has to do with multifarious factors. In the first place, archaeological studies in this part of the country are meager compared to the northern highlands. On the other hand, ethnoarchaeological studies conducted to understand agricultural origins and ancient technologies are commendable and quite promising in shedding light to the archaeological pursuit of understanding the processes of domestication and early agrarian societies. A further point of motivation for ethnoarchaeological research on coffee in southwest Ethiopia is the general tendency in archaeological investigation in the country. Archaeological and ethnoarchaeological studies on the beginning of food production and Holocene environments have been, to a large degree, confined to northern Ethiopia and Eritrea (Agazi 2001; Alemseged 2004; Bard *et al*. 1997; Barnett 1999a; Boardman 1999; Getachew 2006; Phillipson 1977a; 1977b:66-70). Aside from archaeological studies aimed at explaining agricultural origins, recovering plant remains and reconstruction of the Holocene environments, I suppose that the need for ethnoarchaeological study on agricultural origins in an environmentally and culturally diverse context of southwest Ethiopia is equally appealing as already suggested by Hildebrand (2003a). Important information can be generated using ethnoarchaeology and ethnography as research strategies to address specific archaeological enquires by examining the association between domestic plants and their wild progenitors and the ways modern humans cultivate and exploit them within a specific environmental context. Evident to this, Hildebrand reiterates that investigations on contemporary links between humans and plants can aid archaeologists to better understand the association that might have existed in prehistoric times (2003a:1). It also helps to address questions pertaining to site formation processes, and the circumstances under which archaeological signatures relating coffee production and consumption could survive, and be retrieved.

Rapid modernization in Ethiopia, particularly urbanization, the introduction and use of industrial products, and the accompanying changes in the agricultural systems, are equally alluring to conduct ethnoarchaeology. While modern techniques of cultivations are introduced, new crops have been adopted by farmers in the country. The economic turnover of some cash crops has also resulted in an aggressive shift in the choice of farmers cultivating Ethiopian domesticates. Consequently, there is an urgent need to

document indigenous knowledge on the cultivation and consumption of coffee in an environmentally and culturally distinct context of southwest Ethiopia.

> "The past may be a foreign country; for archaeologists engaged in ethnographic research it is often an African one."
>
> Scott MacEachern (1996:243).

Scott MacEachern's statement on the credence of ethnoarchaeological research on the African soil is a still cogent, persuasive and value laden concept. The idea emanates from four distinct yet interrelated factors noticeable in the African continent. These are the presence of diverse communities with striking traditional ways of life, its role as the cradle of humankind and the opportunity there to conduct ethnoarchaeology and experimental archaeology related to prehistoric technology and foraging ways of life, and finally the lack of intensive and systematic archaeological research and economic realities in the continent (MacEachern 1996). Ethnoarchaeological research in Ethiopia is a burgeoning undertaking due to existing cultural and environmental realities. There are several works that support the above statement (see for example, Abadi 2013;Addisalem 2009; Arthur 1997; 2002; 2003; 2006; 2013; Bitaniya 2012; Brandt 1996; Brandt and Weedman 1997; Brandt *et al*. 1996; Bula 2006; 2011; Clark and Kurashina 1981; Frehiwot 2013; Gallagher 1977a; 1977b; Gebre 2012; Gedef 2005; 2009; 2010; Hailu 2005; Hewan 2012; Hiruy 2004; Temesgen 2006; 2008; 2009; 2010; 2011; Temesgen and Giardino 2013; Todd 1985; Todd and Charles 1978; Tsehay 2012; Weedman 2000; 2002a; 2002b; 2005; 2006; Yonatan 2008).

In this dissertation, I will focus on three core areas: (a) to document and describe coffee cultivation methods from a known environmental context, and from a generally traditional farming communities living in southwest Ethiopia (Kafecho, Majangir and Oromo), (b) to compare these cultivation and consumption practices, with an emphasis on the socio-cultural values of coffee and (c) to go beyond description and comparison and explore how societies produce and use materials related to coffee processing and consumption. The primary theoretical issue I deal with is the relationship between humans and a plant of Ethiopian origin, coffee (*Coffea arabica*). I will examine thoroughly the cultivation and consumption of coffee, the production and use of material culture related to the plant (mainly earthenware used to prepare and consume coffee), and assessment of discard patterns of artifacts to get insight on the factors that transform coffee-related artifacts from systemic context into archaeological context. In this perspective, I

put emphasis on and address the general, yet fundamental archaeological enquiry first explained by Schiffer (1972:156), ´´How is the archaeological record formed by behavior in a cultural system?''

This ethnoarchaeological research on coffee cultivation and consumption in southwest Ethiopia is a contribution to the growing record of ethnoarchaeological research on Ethiopian domesticates. The general objective of the research is to gather information and interpret data relating the production and consumption of coffee to explain the archaeological implications of the topic under investigation. As in other ethnoarchaeological studies, the research focuses on material culture in a cultural setting, the various aspects of coffee traditions and the interplay between coffee production, consumption and rituals. The specific objectives of the thesis boil down to the following five core thematic areas.

I. Environment and Cultivation

- To describe traditional coffee cultivation by recording and observing all the different processes such as acquisition and planting seedlings, harvesting and processing of coffee, and the diverse preparation levels involved in the consumption of the beverage.
- To investigate indigenous forms of agronomic knowledge in forest-coffee and open-field coffee plantations so as to assess their varying social and ecological impact, and their sustainability.
- To make inter-site and intra-site comparison on the types of coffee cultivation, its processing and consumption.
- To describe and analyze ethnographic and biological data on the cultivation and consumption of coffee to get insight on the processes and strategies involved in the domestication of the plant.
- To explore the intensity of coffee cultivation for a better understanding of the frequency of cropping.
- To examine whether traditional coffee cultivation takes place in either outfields or infields and how such activities as crop processing, maintenance of tools and storage are handled under infield cultivation.

II. Technology and *Chaîne Opératoire*

- To examine the causes of variability in material culture and its spatio-temporal organization.
- To explore artifact technologies and craft organization focusing on the manufacture of objects related to coffee cultivation, its processing and consumption.

- To scrutinize the formal properties of artifacts, the meaning of their stylistic variation and the social context of their production.
- To make a link between indigenous coffee tradition and pottery technology and related symbolism.
- To examine the technical style of pottery and material culture relating to coffee processing and consumption.
- To examine the degree to which technical choices in pottery production are affected by cultural choices.
- To describe the *chaîne opératoire* in the production of coffee related pottery.

III. Formation of the Archaeological Record

- To investigate and document the process whereby material culture and residues enter into and create the archaeological record.
- To explore the various activities and conditions resulting the formation of such archaeobotanical remains as charred remains and fragments of coffee beans.

IV. Socio-Cultural Aspects

- To explore the relationship between variability in material culture and human behavior/ action, systems of meaning, social organization and patterns of coffee consumption and related rituals.
- To identify the possible context and strategies for the recovery of archaeo-botanical remains by recording the various activities associated with coffee processing, consumption and disposal of residues.
- To document the socio-cultural values of coffee among traditional communities in the study areas.
- To describe the variety of tools associated with coffee cultivation, processing and consumption to interpret the context and use of materials within their cultural context.
- To examine ideas and practices of power and community in relation to coffee production and consumption, with a focus on commensality rituals and material culture.
- To examine the socio-cultural values and pharmacology of coffee.
- To investigate the cultural variations pertaining to coffee consumption.

IV. Analogy

- To describe stages in processing of coffee beginning from harvesting to consumption in order to understand the context in which excavated archaeological remains of coffee could be recovered.
- To demonstrate the effects of charring on such parts of coffee plant as coffee bean, leaf and stem to assess the condition of preservation and the range of factors that affect preservation condition.
- To assess the scatters of artifacts related to coffee and the context in which such remains could form archaeological sites.
- To assess categories of discard, patterning of activities and such use of space as living and activity areas in a systemic context and its archaeological implications.

1.3. Organization of the Thesis

For the purpose of clarity, I have thematically divided the dissertation into four parts. Part I deals with theories and methods used in the ethnoarchaeological study. Accordingly, chapter 2 discusses theoretical issues related to the origins of agriculture in Ethiopia and the Horn. Chapter 3 presents the meaning and nature of ethnoarchaeology and then recaps two critical concepts in the research strategy: analogy, mainly ethnographic analogy and analogical inference and general theory. It also presents materials and methods deployed in the study.

In part II, I will introduce the background and context of the ethnoarchaeological research accentuating on three major themes: the environmental context, the culture and history of the Kafecho and the Majangir in Southern Nations, Nationalities and People's Region (SNNPR) and the Oromo in Jimma zone, Oromiya Regional State. The chapters deal with botanical and historical data pertinent to the production and uses of coffee alongside with the socio-cultural and economic setting of southwest Ethiopia. Accordingly, chapter 4 assesses the complete classification of *Coffea arabica*, how it grows, flowers and bears. Chapter 5 scrutinizes the history of the origins of coffee based on oral traditions and literature. Chapter 6 reviews the environments of southwest Ethiopia focusing on the geological history, climate, vegetation and plant resources of the region in general and the study area in particular. Chapter 7 deals with the demography, language, ethnography and history of the people.

Part III comprises four chapters and is central to the ethnoarchaeological study. Chapter 8 presents the mainstay of the economy of the people putting emphasis on the cultivation of principal crops and the state

of coffee cultivation in the agricultural systems of southwest Ethiopia. In chapter 9, I consider the environmental context and the stages in the cultivation of coffee among the Kafecho, the Majangir and the Oromo of Jimma. Here, I evaluate coffee cultivation in homegardens and the way humans exploit forest-coffee. Chapter 10 presents stages in traditional coffee processing and material culture associated with the processing and consumption of the beverage. The chapter also evaluates the multifarious use of coffee among the three ethnic groups. In chapter 11, I consider the production of coffee related artifacts principally coffee pots, coffee cups, and the *chaîne opératoire* in the technology.

Part IV of the dissertation addresses the archaeological implications of the study and the heritagization of coffee in Ethiopia. Accordingly, chapter 12 examines the processes that cause the formation of archaeological sites based on studies on the life cycle of coffee-related pots. Chapter 13 elucidates coffee as a heritage focusing on emerging trends to monumentalize coffee by way of claiming inheritance over the plant to forge an agricultural heritage at regional level and discourses over the historical ownership of coffee as a heritage. In this context, the objective of the dissertation is assessing the emergence of an apparent ethnic rivalry over coffee, the manifestations of this contemporary contention in southwest Ethiopia and the nuance to which the state and the people in the region make a historical attachment to the plant nationally regarded as a gift to the rest of the world.

Chapter 1.Introduction

Part I. Theories and Methods

Chapter 2.Theoretical Framework on Agricultural Origins in Ethiopia

Chapter 3. Field Methods and Ethnoarchaeological Theories

Part II. Background and Context of the Ethnoarchaeological Research

Chapter 4. The Botany of Coffee

Chapter 5. The History of Coffee

Chapter 6. The Physical Environment of Southwest Ethiopia

Chapter 7. The Socio-Cultural and Historical Setting (Kafecho, Majangir and Oromo)

Part III. The Core of the Ethnoarchaeological Research

Chapter 8. The Economy of the People (Majangir, Kafecho and Oromo)

Chapter 9. Ethnographic Perspectives on Coffee Cultivation (Majangir, Kafecho and Oromo)

Chapter 10. Coffee Processing and Consumption (Majangir, Kafecho and Oromo)

Chapter 11. Variability in Coffee-Related Pottery and the *Chaîne Operatoire* in Production

Part IV. The archaeological implication and the heritage aspect of coffee

Chapter 12. Cultural Formation Processes and Taphonomy of Coffee Beans

Chapter 13. Coffee as an Agricultural Heritage

Chapter 14. Remarks and Conclusions

Figure 1.2. Summary of the structure of the dissertation.

CHAPTER 2

THEORETICAL FRAMEWORK ON AGRICULTURAL ORIGINS IN ETHIOPIA

Prior to domestication of plants and animals by the end of Pleistocene, prehistoric societies relied on wild plants, animals and fish as a source of subsistence (Fagan 1995). The process of domestication entails a deliberate and selective breeding of wild animals and plants eventually leading to morphological change. Domestication appears to have occurred independently in various parts of the world (Fagan 1995; Marshall and Hildebrand 2002; Price and Feinman 1997). Moreover, this transition to domestication is believed to have taken place between 10,000-7000 BP in such parts of the world as the Near East and parts of the present day Sahara desert in Africa (Close and Wendorf 1992; Hole 1998).

The beginning of food production has been a subject of enquiry for several professionals in archaeology and a variety of disciplines. Consequently, diverse hypotheses have been put forth on the subject particularly in an attempt to explain the reasons that led to the beginning of food production. Among the hypotheses proposed to explain this development, include the Oasis hypothesis, the population pressure hypothesis and others (Binford 1968; Childe 1953; Cohen 1977). Muzzolini (1992:237) contends that the emergence of domestication had to do with response to climatic changes and population pressure. In view of that, he further explains that such parts of the Sahara as Tassilin and Nabta Playa are rich in archaeological remains suggesting the occupation of the areas by a large number of people. Consequently, it is plausible to presume that population pressure had caused the occupation of the area, eventually leading to competition among groups hunting extant species in their immediate environment. The result of population pressure was intensification of food collection although the people in the Sahara[6] might not

[6] According to Hassen (1988) and Smith (1992), the Sahara was affected by drought during the mid Holocene (ca. 7000-6000 BP). This arid condition in the region is regarded as a push factor that caused the pastoral groups to abandon the area and move into the Nile Valley and even farther to the central Nile Valley of the Sudan (Haaland 1992; Hassen 1988; Smith 1992). Haaland (1992) further considers the Sahara pastoralists as instrumental in the introduction of domesticated animals (cattle, sheep and goats) among fishing/ hunter-gatherer communities inhabiting the central Nile Valley.

obtain sufficient food in a physically deteriorating environment. Perhaps, the emergence of the domestication of cattle in the Sahara was associated with the factors outlined above (*ibid*.). A number of these hypotheses have paid attention to early evidence from Southwest Asia[7]. Nonetheless, the postulations do not essentially hold true for every place where the process of domestication took place (Harlan 1975). The idea has also been explained in a more specified context relating to agricultural origins in Africa[8] by Phillipson, who notes the derivative nature of food production (chiefly, pastoralism and agriculture) in Africa from the early developments in the near east between about 12,000-10,000 BP. He further remarks the significance of this influence without undervaluing indigenous innovations that led to the beginning of food production in the continent (1977b:58). In the forthcoming sections of the chapter, I consider central issues that would serve as the basis of arguments and discussions in the dissertation.

2.1. The Holocene Background

The early Holocene is considered as a period when foraging economies gave way to plant domestication in various parts of the world (Dincauze 2000:13). Nonetheless, there is a great deal of concern about the challenges surrounding the chronology and location of domestication for some of the plants that have become essential components of modern day food. As regards this, the dearth of archaeological evidence for leafy vegetables and fruits is attributable to preservation problems (Dincauze 2000:13; Harris and Hillman 1989). In this section, therefore, I concisely recapitulate the Holocene climatic condition based on multiple set of data used in paleo-environmental reconstruction (chiefly focusing on pollen analysis and archaeological evidence) in East Africa. I also consider the environmental context under which agriculture emerged.

Environmental studies based on pollen analysis have contributed to the growing literature on vegetation history (Bonnefille and Mohammed 1994; Bonnefille *et al*.1986). Pollen analyses in East Africa point

[7] According to several anthropological studies of the 1980s and 1990s (for example, Bar-Yosef and Khazanov 1992; Hole 1989; Khazanov 1983), Southern Levant, in the Middle East, is considered as the first place where agriculture emerged 10,000 years ago, and from where plant domestication steadily spread north, east and west (Hole 1989). These scholars suppose that domestication of plants (legumes and cereals) predate the process of animal domestication (goats and sheep) by at least 1,000-1,500 years ago.

[8] As regards theoretical discourse, Clark (1962) notes that the beginning of early food production in Africa largely follows a broader global trends, characterized by a shift from migrationist and diffusionist views towards what Shaw *et al.* (1993:9-13) and Bower (1995) regard as emphasis on local innovation and development.

towards the presence of warm and moist conditions in the early part of the Holocene. This was accompanied by change in vegetation characterized by collapse in the reproduction of Gramineae and a rapid growth in pteridophytes (Bakkar and Coetzee 1972; Beuning *et al*. 1997; Coetzee 1967; Fernández *et al*. 2007; Kiage and Biu-Liu 2006; Mworia-Maitima 1991; Olago 2001; Owen *et al.* 1982). The presence of high rainfall in Ethiopian highlands in the early Holocene has been proved through pollen analysis suggesting the pervasiveness of montane forest and thick taxa in the present dry Lake Turkana basin (cf.Bonnefille 1976). In connection with this, Owen and his associates presuppose the possibility of pollen movement into the basin by rivers from the highlands of Ethiopia (Owen *et al*. 1982).

As of the mid Holocene to late Holocene, East Africa experienced a growing decline in moisture. The period, as attested from the regional pollen sequence, was characterized by the beginning of human impact on the environment although paleoenvironmental reconstruction for this period becomes difficult within the tropics due to human impact on the environment. Thus, anthropogenic signals and climatic signals less discernable analogues to the similarities between signatures left due to drought events and signatures resulting from farming and pastoral activities (Merchant *et al.* 2002). By about 4000 ^{14}C year BP, there was an abrupt shift to a drier and more seasonal environment and that has been known from areas as far as Madagascar (Burney 1993). Likewise, a variety of evidence from pollen, diatoms and oxygen isotope records from diatomic silica indicate the prevalence of warm and moist conditions in a rapid climatic change of early Holocene period (Kiage and Biu-Liu 2006).

Evidence of Holocene vegetation has also been recovered from lakes and peat bog cores suggesting the type of flora in highlands. Consequently, the pervasiveness of montane alpine vegetation at Mt. Badda (4000 m) in eastern Ethiopia has been confirmed from pollen spectra of the early Holocene (Hamilton 1982). This evidence from the area suggests the continuity of similar pollen spectra up until pre 10,000 years ago although the continuity of such vegetation by 6000-7000 BP. This has also been known from the pollen deposits and the implication of this evidence is regarded as the persistence of forests. Pollen analysis from Mt. Badda[9] implies the human disturbance of vegetation because of the human cultivation traced back to 1850 BP. Subsequently, there was destruction of podocarpus trees in such a high altitude. Scrutinies based on palynology also imply the onset of forest clearance in the Ethiopian Rift Valley by 2000

[9] Data from Mt.Danka (3830m) in Arsi-Bale massifs also accord with the environmental data from Mt. Badda (Hamilton 1982).

BP. The same is true of southern Ethiopia where the presence of similar disturbance was attested from Arsi highlands beginning from 1850 BP (*ibid.*).

A rather extraordinary example of palynology relating Ethiopian Holocene was brought to light owing to the work of Victor Fernández and his associates in Benishangul Gumuz Regional State in western Ethiopia. The region is one of the least archaeologically explored areas, but the results from K'aaba and Bel K'urk'umu rock-shelters suggest the prevalence of open savanna grassland in the area and its environs during the LSA (Late Stone Age) with very dry climatic conditions in the second half of the Holocene. The study also identified evidence of human impact on vegetation in the form of felling process including data suggesting the use of fire. The results are considered analogous with mid Holocene evidence from Central Sudan and mid and late Holocene data from Tigray region, Northern Ethiopia (See Fernández *et al*. 2007).

Pollen evidence from Lake environments (for example, investigation at Lake Beseka) shows the prevalence of Afromontane vegetation by 9000 BP and the continuation of similar forest taxa up until 6000 BP(Street-Perrot and Perrot 1993:335). Whereas geomorphological evidence studied by Butzer (1981) indicates the presence of high rainfall in Northern Ethiopia by 2000 BP. The environmental change stated above was accompanied by a shift in vegetation cover leading to the restoration of podocarpus forest in the Rift Valley (Bonnefille *et al*. 1986). The presence of high rainfall by 2000 BP resulted in intensification of agriculture in the Aksumite Empire. With this human clearance of natural vegetation increased and thus both anthropogenic and natural factors increased the rate of soil erosion in northern Ethiopia (Bard *et al.* 2000; Fattovich *et al.* 2000). It should be noted, here, that the mid Holocene saw the diffusion of some animals, chiefly cattle and ovicaprids(Clark 1976;1980) and non-Ethiopian cultigens such as wheat and barley and the plough from the Nile Valley into the Ethiopian highlands (Ehret 1979). Later on, a more intensive food production system developed owing to the introduction of the plough (Gregg 1988). With the evolution of an intensive food production system in the highlands, there emerged a strong link between farmers in the highlands and pastoralists living along the Red Sea coast and the Afar Rift (Brandt and Carder 1987) on top of the pastoral and mixed-farming systems prevailing in Eastern Sudan and Western Ethiopia (Sadr 1991).

One of the models on early food production in Ethiopia and the Horn, for instance, considers environmental conditions prevailing during the last glacial and early Holocene. In explaining the domestication of *ensät*,

Brandt and Fattovich (1990) postulate that during the last glacial (18,000-10,000), there prevailed hyper-arid conditions in Ethiopia and East Africa (Brandt 1982; 1984; 1996; Brandt and Fattovich 1990). Consequently, there was a major change in environment and abundance and predictability of critical resources (Ambrose 1984; Brook *et al.* 1997; Gasse *et al* 1980; Hamilton 1982). Brandt contends that the highlands of Ethiopia were favored places of habitation and thus led to the emergence of a complex and more sedentary hunter-gatherer system utilizing some animals and plants like *ensät*. He further hypothesizes the domestication of *ensät* and the emergence of shifting cultivation system between 10,000 and 5000 BP. An idea that further strengthens the above view is held by Hayden (1982) and Henry (1989) who noted the intensive exploitation of stress relieving reliable food resources (plants and animals) in such environmental context.

Brandt and Carder (1987) propose mid Holocene (i.e. 4, 000 to 5,000 years ago) as the period in which the introduction of foreign domesticates (for example, cattle, sheep, and goats) into Ethiopia took place. The period also saw the introduction of wheat and barley and the development of an intensive form of agriculture involving the deployment of the plow, irrigation and terracing along with the application of animal manure as fertilizer for such Ethiopian domesticates as *Enset ventricosum* (Brandt *et al*. 1997).

A). Phase I: Terminal Pleistocene (9000BC): Early Holocene (5000 BC)

Hunting and gathering made up an indispensable means of substance during Phase I in the environmental and cultural sequence of Ethiopia. The period was commonly characterized by wet climate, and hence the presence of several fresh water lakes amongst which Lake Beseka in southern part of Afar could be of principal example. The period was also noted for the presence of intense pedogenic (i.e soil formation process) and the abundance of dense vegetation cover (Clark 1974).

B). Phase II: 4000-3000 BP

During this period, drier condition prevailed and hence dry forest vegetation, comprising podocarpus and *Juniperus procera,* were common in the northern highlands. Archaeological evidence from different sites in Ethiopia (for instance, Lake Beseka, Laga Oda, Quiha rock-shelter, Yabello and the highlands of Tembien) suggest that animal husbandry was a means of adaptation (Agazi 2001; Barnett 1999a; Brandt 1982; Clark and Prince 1978; Girma 2001).

C). Phase III: 520 BC-7th Century AD

Archaeological data from Betä-Giyorgis, Aksum, Natchabeit and Lalibela caves indicate that plants were used as an additional subsistence. The studies at these sites reveal that wheat, barley, *tef,* lentil, emmer, flax, finger millet, sorghum, *noog*, chickpeas and legumes were in use as part of the substance economy in a generally dry climate (Bard *et al.* 1997; Boardman 1999; Dombrowski 1971).

The above environmental data, particularly the change in landscape due to of anthropogenic actions, accord with the archaeological data pertaining to the beginning of agriculture. The change in subsistence economy resulting from the Neolithic was also accompanied by transformation in socio-cultural paradigms as deduced from multiple set of archaeological evidence. Some concluding remarks can be made on the onset of early agriculture in Ethiopia. In the first place, allochthonous and autochthonous views on the origins of agriculture are not mutually exclusive, but complement each other. Second, archaeological data on the beginning of agriculture in the country is very limited although suffice to confirm its antiquity. Recent scrutinies in the field have also augmented data from archaeological and botanical studies. Third and finally, the archaeological literature on the transition from foraging to agriculture (Neolithic) mull over both direct and circumstantial archaeological evidence recovered from a very few sites in the country (Finneran 2007). Circumstantial evidence like rock art suffers from problem of dating and some of the archaeological evidence from a few of the Neolithic sites come from disturbed contexts and hence remain undated. Mention can be made of the cultural and archaeobotanical remains from Anqqer-Baahti in Aksum area recovered from disturbed contexts (Finneran 2000a) and the undated cultural materials from Gorgora (Moysey 1943). Other undated sites, though, could add to the archaeological knowledge on the subject under discussion, could not be precisely be placed within the chronological framework of early food production.

2.2. Theories and Models on the Origins of Food Production in Ethiopia

Investigations on early food production in Ethiopia and the Horn began in the mid 1920s with the work of a Russian geneticist Nikolai Vavilov, who based on genetic diversity of crop plants proposed Ethiopia as one of the eight centers of domesticated plants in the world (1926; 1951). Vavilov's observation of a variety of cultivated cereals[10] in Ethiopian highlands, led him to equate diversity with an enduring process of domestication (Vavilov 1951). Although Vavilov's view of categorizing Ethiopia as one of the primary centers of prehistoric agriculture did not get approval from Harlan (1975) and Saur (1952) who painstakingly questioned Vavilov's centers of diversity, which they disputed, might not essentially represent primary centers of domestication.

The domestication of plants and animals in the Horn of Africa appears to have begun between ca. 4000-6000 BP. Domesticated cultigens of Ethiopia include *tef*[11] (*Eragrostis tef*), *ensät* (*Enset ventricosum*), noog (*Guizota abyssinica*), *cat* (*Catha edulis*), coffee (*Coffea arabica*) and finger millet (*Elusine coracana*)[12] (Brandt 1984a; Clark 1980; 1988; Harlan 1971; Mitchell 2005). Besides these, wheat and barley might have arrived from the Nile Valley, Egypt to Ethiopia during the mid Holocene (Brandt 1984a; Clark 1980; 1988; Harlan 1971). The Ethiopian domesticates outlined above have been considered by Westphal (1974; 1975) as plants with far reaching significance in the agricultural system of the country today. Subsequently, he identifies four agricultural systems in different geographical zones of the country: (a) the seed-farming complex in central and northern highlands, eastern highlands and the Konso and its adjacent areas, (b) the *ensät* planting complex almost entirely in use by people in southwest Ethiopia, (c) shifting cultivation in western and southwestern borders of the Ethiopian highlands and (d) the pastoral complex, frequently though not always, practiced in the lower and drier parts of the country(Westphal 1974: 21-44). Note should

[10] A view that accords with Vavilov's focus on the antiquity of cereal production has been suggested by botanists, who according to Finneran (2007:68), "have always considered the cereal cultivation systems of highland Ethiopia to be some of the most ancient in the world.''

[11] *Tef*, dated to the first millennium BC, occurs in the archaeological record at Hajar bin Humeid in South Yemen (Van Beek 1969 cited in Phillipson 1977b:60). Although primary evidence on the crop has not yet been recovered in Ethiopia, the crop could have been under the plough at a relatively earlier date (Phillipson 1977b).

[12] Phillipson included *Elusine coracana, Eragrostis tef, and Guizota abyssinica* in his list of indigenous African crops while considering coffee as another credible Ethiopian domesticate (1977b:59).

be made, here, that the production of livestock constitutes an indispensible part of the economic system along the borderlands of Ethiopia where arid and semi-arid weather conditions prevail (Amare 1978; 1980).

By the standards of other centers of domestication, the magnitude of research on the development of early food production in Ethiopia has been very small. Pertinent data, albeit meager, on the subject comes from only a few prehistoric sites in different parts of the country (Barnett 1999a; 1999b; Brandt 1980; 1982; 1984; Clark 1988; Dombrowski 1970; Phillipson 1993b). Moreover, archaeologists and other professionals, who conducted investigation on the origins of food production in Ethiopia and the Horn, and the Nile Valley of the Sudan, postulated theories reflecting on various factors, but predominantly, focusing on the impacts of climatic change, population pressure and diffusion (Clark 1988; Ehret 1976;1979; Haaland 1992).

From theoretical perspectives, the different hypothesis set forth to explain the origins and development of agriculture boil down to two principal categories: Allochthonous (external models) and Autochthonous (internal models) (see Brandt 1984; Brandt and Fattovich 1990; Phillipson 1993a). Proponents of the external model (for example, Clark 1962; 1980; 1988; Dogget 1970; Murdock 1959; Seligman 1930) emphasize on either diffusion of foreign domesticates or migration of people as a major spur for the beginning of early food production in Ethiopia. A second group of scholars, for instance Agazi (1997c; 2001), Brandt (1984) and Ehret (1976; 1979), stress on the role of indigenous people of Ethiopia and the Horn for the beginning of food production independently in their respective regions. Based on views suggested by proponents the two models, the forthcoming sections illustrate the kernels of these elucidations.

2.2.1. Allochthonous Model

Scholars at the forefront of the allochthonous model have paid a greater weight to external influence as a cause for the beginning of agriculture. Adherents of this view predominantly emphasize the influence from Near East (Dogget 1970; Purseglove 1976; Seligman 1930) and a sway from the Sudan and Egypt (Clark 1962; 1980; 1988; Murdock 1959; Simoons 1965).

A) Influence from the Near East

One group of scholars has attributed the introduction of agriculture to Ethiopia to the influence from the Near East mainly Southwest Asia and Arabian Peninsula. C.G. Seligman, one of the main figures of the external model, ascribes the introduction of such crops as emmer (*Triticum dioccum*) and barley (*Hordeum vulgare*) and the plow into the Ethiopian highlands to the alleged migrations of "Hamitic" people from Southwest Asia (Seligman 1930). His view was further elaborated in the works of Dogget (1965:59; 1970:3) and Purseglove (1976:293), who explicate the migration of "Caucasoid" people from Southwest Asia or Arabian Peninsula into northeast Africa by 5000 BP and the subsequent introduction of barley and wheat to the inhabitants of northern Ethiopia. The scholars propose the 3rd millennium BC as a date for the domestication of sorghum *(Sorghum bicolor*) by descendants of "Caucasoid" migrants.

B) The Sway from the Nile Valley: Egypt and Sudan

In this section, I consider what has generally been regarded as a second path of influence for the beginning of food production in Ethiopia, the Nile Valley. Before exploring the archaeological evidence provided as the basis of this postulation, I pithily reiterate the archaeological literature on major changes in the economy of the region since it serves as a precedent to discussions in the subsequent paragraphs of this section. Understanding the mid and late Holocene economic changes in northern and eastern highland regions requires deliberation of data from the Middle Nile Valley. Nevertheless, conditions were much different in Egypt and the Sudan. For instance, hunting/gathering with simple fishing technology was practiced in the Egyptian Nile Valley as attested from sites dated between 40,000 to 25,000 bp. This economy was confined to this area until 9500 bp when the technology was also found in the Saharan/savanna region, the Sudanese Nile Valley and East Africa (Haaland 1992). Although a long tradition of wild grass and wild plant exploitation had been practiced in Wadi-Kubanniya area, the introduction and domestication of cereals known to be Western Asian origin did not take place until c. 8 kya, which still is the oldest evidence of domesticated plant in Africa. Yet, domesticates of African origin were identified only in a rather late context (Finneran 2007).

Based on study in two Nile Valley complexes, the Khartoum and Atbara area, Haaland (1992) points out changes in the subsistence economy of the middle Nile Valley during early and mid Holocene. Accordingly, significant changes were attested for the period 10,000-2,000 bp. These entail the appearance of hunting-

gathering with intensive fishing in Atbara region by about 8500 bp, fish exploitation with animal husbandry and the cultivation of wild sorghum in Khartoum area beginning from 6000 bp and the appearance of domesticated sorghum in the Sudanese Nile Valley by 2000 bp.

From technological point of view, the first evidence of pottery occurs from around 9500 bp when hunting/gathering and simple aquatic resource exploitation was the chief subsistence strategy. This pottery is typified by its dotted wavy-line decoration and open mouthed globular pots; it is so complex that it is likely to have been developed from earlier forms, most probably amid people with a long history of aquatic resource exploitation in the Nile Valley. But, dotted wavy-line pottery has a very wide spatio-temporal distribution, being found in sites as far separated as the Khartoum area of the Nile Valley. The invention of pottery and harpoons are regarded as significant events in the process, which led to the intensification of aquatic resource consumption first attested in the Nile Valley around 8500 bp (Haaland 1992). Given this background on the process of resource exploitation and related technological innovation mainly pottery, the following paragraphs of this section present an assessment of the influence from Nile Valley area.

There are two differing views on the impact of migrations of Sudanic people and its contribution to the onset of food production in the Horn of Africa in general and Ethiopia in particular. The very idea of attributing the introduction of food production in the Horn to the Sudanic influence is ascribed to George Peter Murdock, who in his book *Africa: Its People and their Culture* (1959) asserts the infiltration of Eastern Sudanic-Speaking "Prenilotes"[13] into the highlands of Ethiopia before 3000 BC. The result was the introduction of Sudanic type of agricultural technology (chiefly the cultivation of sorghum, cotton and other crops with the aid of the hoe and digging stick) and animal husbandry to the indigenous hunter-gatherers[14] of the low-lying areas adjoining the hills in western Ethiopia a little bit prior to 5000 BP. He also ascribes the introduction of wheat and barley to the influx of Semietic speaking people).

[13] Murdock(1959:171-172) also gives the physical description of the Pre-nilotes as ´´Negroid people resembling the Nuba´´ and lists twelve ethnic groups that could be identified as Prenilotes (Anuak [Anyuaa], ''Baria''[Nara], Berta, Gule, Gumuz, Ingassana, Kunama, Koma [Komo], Mao, Meban, Shilluk and Masongo[Majangir/Majang as used by Stauder(1968,1971)]. The two terms, Majangir and Majang, are widely used today although the latter appellation has been formalized by authorities of Majang zone in Gambela.

[14] Murdock (1959) uses the designation ''Bushmanoid'' and ´´Caucasoid Cushite'' for the indigenous hunter-gatherers adopting the Sudanic agricultural technologies.

An antithesis to the view proposed by Murdock can be found in Fredrick Simoons' work on the economic prehistory of Ethiopia in which he (1965) attributes the introduction of wheat and barley to the presumed contact between the Ethiopian highlands and Egypt in the period predating the Semietic influx from Yemen during the last millennium BC. Consequently, he states that the two crops and the plow were known to the Cushitic inhabitants[15] of northern Ethiopia thereby attributing the introduction of these crops and the plough to the contact with Nubia perhaps through the agency of Arkell's "C group."[16]

Both Murdock and Simoons regard the central Cushitic people and, above all, the Agäw as the first Ethiopians to make use of the plow in the cultivation of crops in a mixed farming economy that combined raising livestock and the cultivation of indigenous crops (*tef* and finger millet). They also regard ancient Egypt as a source for the introduction of some animals (for example, cattle, sheep and goats), such crops as wheat and barley, and the plow, a still central agricultural technology in Ethiopia, from ancient Egypt (Murdock 1959; Simoons 1960; 1965). A model analogous to Simoons' diffusionist perspective was put forward by Barnett (1999b), who postulates the arrival of temperate crops to Ethiopia subsequent to the establishment of exchange relations with Egypt later than the 5th millennium bp. Barnett further stipulates the late beginning of farming in Ethiopia attributing the cultural development to the establishment of Southwest Asian crops during the 3rd millennium bp. Thus, she ascribes the absence of indigenous domestication in the early mid Holocene to the arid climatic conditions of the late 7th millennium BP and (or) external cultural impulse.

The introduction of agriculture into Ethiopia and the Horn via migration has also been at the heart of the works of Desmond Clark (1954; 1962; 1976; 1980; 1988). In a rather different perspective, Clark regards the mid Holocene arid condition in the Sahara[17] as a push factor, which resulted in the migration of the

[15] The first use of the plow and the development of a farming system blending rearing of animals and cultivation of cereals, essentially *tef* and finger millet, is associated with the central Cushitic people, for example the Agäw (Murdock 1959; Simoons 1960; 1965).

[16] Arkell's ''C- group'', presumed to be originally from the Sahara, represent group of pastoralists who migrated to Nubia soon after the middle of the third millennium BC (Arkell 1961:46-54; Trigger 1976:49-63 in Phillipson 1977b:66).

[17] Concomitant to this view, Hassan (1986) elucidates the desiccation of the Sahara as an impetus to the formation of cluster of settlements in the Nile Valley, which perhaps gave rise to the beginning of agriculture in the region. In a similar context, Phillipson (1977b:66) considers the beginning of food production in Ethiopia as part of this continuous process resulting from the arid condition in the Sahara.

Nubian “C-Group” pastoralists from the Sahara through Sudanese Nubia into the highlands of northern Ethiopia extending as far as the Somali plateau. The movement was necessitated by a need for pastures and eventually resulted in the introduction of pastoral ways of life. Consequently, Clark hypothesizes that these pastoralists had come across hunter-gatherer Cushitic peoples of the Horn to whom they introduced the domestication of animals and plants. To buttress his notion of migration caused by aridity, Clark (1980) itemizes such implements as the hoe and the digging stick, the sickle, threshing sticks and the winnowing baskets and evaluates the extant correlations between these agricultural implements of the Sudan and Ethiopia. Clark’s early proposition of the mid Holocene arid condition as an impetus to population movement out of the Sahara is maintained by Neumann(2005:250) who based on data from the Sahara suggest the presence of progressive desiccation after 5000 bp and regards this climatic setting as a driving force for southward migrations and innovations embracing agriculture.

Archaeological sites pertaining to the “C-group” in Nubia and Kerma have yielded pottery evidence analogues to those from Aqordat sites in Eritrea. There also exists a common style of pots with three stands (also called tripods) in the “C-Group” burials in Nubia and the Aqordat materials (Arkell 1954 cited in Clark 1988). Arkell’s evidence from Aqordat (ground stone axes, small stone palettes and dishes, and a variety of stone bracelets, beads, lip-plugs and pendants) and a wide range of pottery come from surface collections. Pottery from this site was originally thought by Arkell (1964) and Bailloud (1969) to be analogues with those from the area north east of Lake Chad. Nonetheless, the Aqordat pottery was later interpreted by Fattovich and his associates in a different way as representing a variant of the Atbai ceramic tradition belonging to Eastern Sudan, and thus suggesting the presence of contacts between Ethiopia and Nubia, and possibly with Egypt (Fattovich 1988; Fattovich *et al*. 1984).

In recent times, archaeological remains mainly pottery unearthed from the Sudanese-Ethiopian borderland point towards plausible population movements between the Nile Savannah and the forested escarpment (Fernández *et al.* 2007). In view of that, Fernández and his colleagues elucidated that the pottery evidence from the rock-shelter of Belk’urk’umu exhibit closer affinity with those from the different phases of occupation in the Sudan. From chronological perspectives, sherds decorated with wavy line incised motifs and varieties of packed and spaced zigzags as well as those decorated with big dots are found to be analogous with those from Mesolithic (Early Sudan) dated from ca.8000-6000 bp. The rocker type is also typical of the beginning of the subsequent Neolithic period. Pottery decoration types identified from the area

show characteristic features of the later phases in the Sudan Neolithic (ca.6000.6500 bp) and even the Late Neolithic or Jebel Moya Phase (ca. 5000-3000 bp). The sway from Sudanese Neolithic in Benishangul area is also substantiated by the unearthing of a cylindrical grinder of granite, and a partly polished adze and a fragmented "net sinker" or ornament made of a potsherd akin to materials recovered in Sudanese Mesolithic sites. Fernández (2003b:415) regards Haaland's (1992:44, figure 3) potsherd net sinkers as an evidence of some fishing practices.

Although no faunal remains were recovered from the archaeological study in Benishangul, the pollen record from LSA levels of K'aaba and in Bel K'urk'umu are rich in "dung-loving fungi of *Sordaria* type" (Fernández *et al.* 2007:121). This evidence is commonly related with domestic cattle and that is viewed as a proof to the presence of some sort of domestication activities at the sites- a process correlated with a probable influx of Sudanese herders from the plains (*ibid.*).

2.2.2. Autochthonous Model

Now, I will turn into discussion of a rather different view based on studies in Ethiopia and the Horn. The evidence used as a foundation of arguing for an indigenous agricultural origin in this part of Africa, as understood from earlier works, are derived from an array of data.

Evidence from linguistic geography and historical linguistic data has been in use to develop a model for the origins of food production in Ethiopia and the Horn by Christopher Ehret (1976; 1979; 1984) who suggested the 7th millennium BC as the beginning of food production in Ethiopia and the Horn. Ehret robustly underscores that by the final Pleistocene 'proto-Afroasiatic' inhabitants of northeastern Africa (predecessors of the Berber, Chadic, Semietic, Omotic, and Cushitic branches of present day Afro-Asiatic language family) were intensively harvesting wild grasses, a process which eventually led to the domestication of these plants.

Ehret (1976; 1979) further stipulates the introduction of barley, wheat and the plough into the Horn of Africa from the Nile Valley, and sheep and goats from Southwest Asia via Northeast Africa. Besides, he explains that domestic cattle and donkeys may have bred from local Northeastern African stock. He also relates the development of agriculture in the Horn with the spread of Afro-Asiatic language speaking communities from northern Horn west of the Nile and northward from the Nile into their present day settlement in Ethiopia and

the Horn. Ehret (1979:14) postulates that climatic change was a causal factor in transforming hunter-gatherers to food producers. However, his hypothesis has not been supported by satisfactory data partly due to the dearth of archaeological evidence on early food production in Ethiopia.

The postulation that considers agriculture as an indigenous development in the Horn of Africa was also supported by Brandt and Carder (1987). Although Brandt supports Ehret's notion of indigenous origin of agriculture in the Horn and Clark's explanation relating environmental desiccation during the mid Holocene, he considers the theoretical and methodological aspects of the approaches used by them as less cogent in validating the origin of agriculture. From paleoenvironmental perspectives, Brandt (1984) argues that around 18,000 years ago, the hyper-arid conditions of the Last Glacial Maximum (LGM) resulted in the distraction of the pre-existing economic and demographic stability of hunter-gatherers in southern Ethiopia[18]. The consequence of protracted aridity was an increase in the decline of food resources and enforced shift from foraging to collection and storage of local staples. The exploitation of plants like *ensät* has eventually led to its domestication.

Both indigenous developments and external contacts were given due attention in the work of Barnett (1999a) who considers humid conditions of the early Holocene principally of the early seventh millennium BP as a factor that fostered the revival of vegetation. Such changes in the environmental condition promoted a transition to sedentary life through exploitation of the available resources. Barnett further elucidates that the archaeological record lacks evidence on such exploitation by the onset of an arid phase in the late 7th millennium BP. According to her postulation, the domestication of animals and the arrival of Middle Eastern plant domesticates might go as far back as the 6th millennium BP and the 5th millennium BP respectively. However, the archaeological record for the above-specified period is lamentably silent on the subject. Even then, the appearance of Middle Eastern crops did not go beyond the 3rd millennium BP and evidences for animal domestication are not earlier than the 4th millennium BP (Hildebrand 2003a; 2003b).

[18] Brandt and Fattovich (1990) suggest the mid Holocene as period for the introduction of domestic animals to southern Ethiopia.

2.3. The Archaeological Record

The general directions in the investigation of agricultural economies has been commented by Engels and Hawkes (1991), who emphasize the attention paid to genetic diversity of plants and the deployment of such data in research with ethnobotanical trajectories. However, the application of such approaches demands the use of analogy to get a better understanding of the degree of flexibility in the choice of resources, and the way adaptive mechanisms to environmental stress leave signatures in the archaeological record (Butler 1998; Holt and Lawrence 1993b). Analogy also furnishes insights on the prospects of uncovering crop remains at various levels of processing from the archaeological record (D'Andrea *et al*. 1997; 1999).

Our understanding about domesticated plants and animals depend on the archaeological record. In Africa, for instance, there is a tendency to conduct research on cereal crops than tubers and vegetables. This is ascribed owing to the relatively better chance of preservation cereals have (Phillipson 1993b). In view of that, the evolution of early food production in Ethiopia and the Horn has been a subject of archaeological enquiry for several decades although a growing number of archaeologists delved into the subject only as of the 1970s. In the forthcoming parts of this section, I will present a brief précis of the developmental stages in the study of early food production in the region, and discuss the findings of these research undertakings and their contribution to the repertoire of our archaeological knowledge on the subject.

A). Stage I: The Pre 1970s

Prior to the 1970s, efforts to address archaeological enquiries related to early food production were minimal. Even then, the period generally witnessed the formulation of models to explain the onset of food production in a rather speculative way thereby putting accent on the notion of diffusion from either the Nile Valley or Southern Arabia, areas ostensibly considered as centers of origins (Clark 1962; Murdock 1959; Simoons 1965).

B). Stage II: 1970s-1980s

In the subsequent two decades (1970s and 1980s), data generated from excavations by Joanne Dombrowski and Steve Brandt around Lake Tana and Lake Beseka correspondingly augmented the archaeological acquaintance on the type and chronology of data pertaining the onset of early food production in Ethiopia (Brandt 1980; Dombrowski 1970).

C). Stage III: The 1990s

Apart from other archaeological studies on early food production (for example, Barnett's revitalization of the Quiha materials), two central themes were addressed in 1990s: excavation of mid Holocene sites in Tigray (Agazi 1997a; Finneran 1999) and emphasis on the study of *ensät* based vege-agriculture economies in southern plateaus(Brandt *et al.* 1997).

In Ethiopia, archaeological data on the origin and spread of domestication is scarce. Evidently, direct archaeological data pertaining to the domestication of plants and animals have been recovered from few sites. These are Lalibela and Natchabiet caves in Begemeder, Gobedera rock-shelter in Aksum, Laga Oda rock-shelter in Hararghe, Quiha rock-shelter near Mekele, Lake Beseka around Mätahara, and Tembien to the northwest of Mekele, and Yabello in Borena (Agazi 2001; Barnett 1999a; Brandt 1982; Dombrowski 1971; Phillipson 1977a; Clark and Williams 1978; Girma 2001). Of these sites, archaeobotanical evidence relating domesticated wheat, barley, lentils, and flax have been recovered from first millennium BC contexts near Aksum (Bard *et al.* 1997: Boardman 1999; 2000; D'Andrea 2008), together with barley, chickpeas and other tentatively indentified legumes from Lalibela cave (Dombrowski 1971). In this part, I will briefly review relevant evidence from eight excavated sites in the country thereby validating the contribution of the studies in augmenting our knowledge on the onset of food production. Some of the evidence come from prehistoric rock art sites and are thus inherently circumstantial in their attribute.

I. Gobedera Rock-Shelter

The Gobedera rock-shelter, lying between 4 and 6 km west of Aksum in a rocky ridge, was one of the earliest investigated for its value on the beginning of food production. Excavation[19] at the site yielded seeds of finger millet and a complete camel tooth[20] from stratum IIb attributed to 4th or 3rd millennium BC. Excavation at the site also revealed five bovid teeth from the upper layers of the site. Phillipson suggests ca. 3500 BP as a date for the date for one of the bovid teeth belonging to domestic cattle (Phillipson 1977a). Although the finger millet seeds from Gobedera were originally presumed as the oldest remains of any indigenous cultivated cereals in Africa, he also stressed the difficulty of formulating hypotheses based

[19] Phillipson (1977a:81) notes, with a rather less certainty, on the probable occurrence of domestic ox in stratum IIa of the site.

[20] Phillipson's early date on domesticated camel in the Horn has been questioned by Brandt (1984a; 1987), who underscored the insufficient nature of the evidence to make a logical explanation on camel domestication in the region.

on the single camel tooth and the finger millet seeds from the site (Phillipson 1977a:81). Later, direct dating proved that the finger millet was intrusive and was identified to be only about 1000 years old (Phillipson 1993b).

II. Quiha Rock-Shelter

Another archaeological investigation on food production from Quiha rock-shelter in northern Ethiopian highlands is related to the domestication of animal. The site was first excavated in 1940s by Lieutenant-Colonel F.Moysey[21] who uncovered animal bones in association with stone tools (Barnett 1999a). Although a comprehensive publication on the excavated materials has not appeared, Barnett's report provide a modest detail of the remains and their contributions to understand the cultural development in the later prehistory of Ethiopia and the interrelationship between Ethiopia and the neighboring regions. The artifacts[22] uncovered by Moysey have been revisited by Barnett in 1990s and her analysis indicates the presence of domestic cattle in a cultural layer dated to the 6th millennium BP, a date proposed on the basis of ceramic evidence (Barnett 1999a:22).

III. Neolithic Sites and Rock Art in Tembien

Based on archaeological surveys in the Tembien area of Tigray in Northern Ethiopia, Agazi (2001) identified such Neolithic cave sites as Daneil Kawlos, Ba'ati Ataro, Dabo Zellelew, Shegelu and Emba Ahmedin rock-shelter and discovered new rock art sites[23] (Dabo Zellelew, Mihdar Ab'ur, Tselim Ba'ati). His excavation at Daneil Kawlos cave revealed lithic assemblage comprising scrapers, an array of shaped tools, ceramics and faunal remains in which domestic cattle and a possible caprine specimen. Likewise, the site of Ba'ati Ataro has been associated with cultural materials (mainly lithic artifacts and pottery), a domestic stock, and more notably the appearance of domestic cattle and caprines. In other sites, he

[21]He was known for his excavation at Gorgora rock-shelter north of Lake Tana in addition to his identification of numerous Middle Stone Age and Late Stone Age sits surface deposits in different parts of Ethiopia and Somalia (see Barnett 1999a; Leaky 1943; Moysey 1943).

[22] The occurrence of animal bones with retouched stone tools at Quiha has been regarded as distinct from "Elementeitan Industry" of East Africa. The industry is characterized by obsidian artifacts with high assemblage of long blades (Clark 1954).

[23]Agazi (2001:191) placed the engravings at Dabo Zellelew and Mihdar Abu'r and naturalistic paintings of Tselim Ba'ati under the earliest ''Surre-Hanakiya'' stage while putting pictographs at Dabo Zellelew and the superimposed schematic paintings of Tselim Ba'ati in the 'Dahathami style proper' of the rock art tradition in the Horn of Africa.

attested the presence of lithic industry dominated by a range shaped tools, a grinding stone and potsherds at Dabo Zellelew, and lithics and potsherds at Shegelu. Unlike the other sites in Tembien, excavation at the rock-shelter of Emba Ahmedin yielded no lithic material except few potsherds. Notwithstanding the value of the sites in the reconstruction of the culture history of the area, Agazi (2001:172) succinctly notes the difficulty to determine the age of the cultural materials from these sites chronometrically owing to the absence of charcoal in the excavation units.

In reconstructing the culture historic sequence of the Tembien area, Agazi (2001:206) relies on radiocarbon dates from the excavated sites and the noticeable affinity of lithic ceramic assemblages recovered from the sites. He finally postulates the occupation of the area and the presence of a food producing economy since the mid Holocene and tentatively established three occupation periods of the Tembien sites.

Even though the chronological sequence of the archaeological site of Aksum in northern Ethiopia is generally uncertain, excavation in the area indicates broader-spectrum agriculture (Phillipson and Reynolds 1996). Another site, to be cited here, is the rock-shelter of Anqqer-Baahti near Aksum where excavation by Finneran (2000) uncovered data on both exotic and indigenous crop remains including *ŧef*. By all accounts, the site is loosely defined because of intrusion and contamination. Other set of evidence on early food production from Aksumite sites in northern Ethiopia occur in the form of figurines of yoked oxen, pottery akin to contemporary *injära* trays, coffee pots and coins portraying possibly emmer wheat. An inscription from Aksumite period also point towards consumption of loaves of bread (similar to modern day Ethiopian bread called *dabbo*) made from wheat (Phillipson 1993b).

A further evidence on utilization of domesticated plants come from domesticated wheat (*Triticum oestivum*) and barley (*Hordeum vulgare*) dated to around 2335 years BP, and lentils (*Lens culinaris*) and grapes (*Vitis vinifera*) dated to the early second millennium BP were discovered from the site of Ona Nagast on Betä-Giyorgis hill near Aksum. The site also yielded such artifacts as ceramics and grinding tools implying diverse use of some plants, principally starchy grains and tubers since at least the 7th millennium BP (Barnett 1999b).

IV. Lalibela and Natchabiet Caves, Northwest Ethiopia

Direct archaeological evidence on early food production, mainly of cereals and legumes originally domesticated in Southwest Asia, comes from Joanne Dombrowski's (1970; 1971) excavation at Lalibela and Natchabiet caves in northwest Ethiopia. At both sites, the upper occupation levels are ascribed to the Iron Age. At lower level of Lalibela cave, Dombrowski discovered remains of food crops (charred barley, unspecified legumes, and chickpeas) together with animal remains considered to be of domesticated cattle and small stock dated to 2500 BP. Besides, microlithic tools and pottery have been attested from Natchabiet. Her excavation, however, did not disclose deposits older than ca.500 bc.

V. Laga Oda Rock-Shelter

Another site that has yielded evidence on the domestication of animal is the rock-shelter of Laga Oda found 25 km southeast of Dire-Dawa on the escarpment of the southeastern Ethiopian plateau. Clark and his associates carried out excavations at the rock-shelter in 1975 and consequently recovered remains of a body of a possible domestic camel from the upper stratum dated ca. 1300 AD (Clark and Prince 1978). Clark also puts forward the 1st millennium AD as a probable period for the introduction of camels into Ethiopia and the Horn (see Clark 1976). Stone tools recovered from the rock-shelter exhibiting "sickle sheen'' were interpreted as a signal for harvesting phytolith producing silicate bodies in plants producing grasses and other plants (Clark and Williams 1978).

VI. Evidence from Lake Beseka

In 1975, Clark and his crew carried out a fieldwork in Lake Beseka area situated 200 km southeast of Addis Ababa. The team recovered stone tools mainly end scrapers and convex scrapers, potsherds and perhaps cattle teeth dated back to 3400 BP. The excavation at the site revealed data on the type of fauna and material culture. In view of that, the lower stratum was rich in remains of fish, which were lacking in the upper stratum from where the team recovered stone tools, namely end scrapers and convex scrapers, and possible domesticated faunal remains (Brandt 1986; Clark and Williams 1978).

VII. Southern Ethiopia: The Rock-Shelters of Yabello, Deakole and Borema

The prehistory of pastoralism in southern Ethiopia has been a subject of archaeological enquiry within the general discourse of the origins of food production in Ethiopia and the Horn. In this context, rock art sites in southern Ethiopia have been studied archaeologically by Clark (1945) and Girma (2001). While Clark gives a primary account on the then less known Yabello pictographs depicting humped cattle, Girma's study of three rock art sites at Yabello, Deakole and Borema in the Borena area has further augmented our knowledge on the culture-history of the prehistory of the area.

The rock-shelters of Yabello and Deakole are noted for representations of humped and humpless cattle and camels although they have depictions of hunting scenes. In addition, both wild and domestic animals are depicted at Borema; almost all of the sites, however, lack dating and establishing chronological sequence has been possible at the Yabello rock-shelter, where Girma (2001) identified faunal remains of domestic and wild, artifacts and charcoal. Consequently, a radio carbon date of ca.1990 BP- 4000 BP was established at the sixth level of YAB-4 and this date approximately fall within the period of climatic changes of the mid Holocene[24](Girma 2001). Girma further stipulates that the archaeological evidence and rock paintings from Yabello and its environs suggest that the area was perhaps inhabited by societies with food producing economies prior to 4,100 BP. Nonetheless, flotation samples from Yabello did not yield evidence on domesticated floral remains (*ibid.* 201). Although the rock paintings in Borena suggest about the subsistence economy of prehistoric communities, the absence of further archaeological studies deter making conclusive remarks on the condition of domestication in this part of Ethiopia.

On the other hand, archaeological research on *Coffea arabica* has been meager as organic remains survive less in wet tropical environments (Young and Thompson 1999). Nonetheless, recent investigations in caves and rock-shelters in the wet cool highlands of Kafa in southwest Ethiopia are beginning to shed promising evidence relating the subject thereby signifying the potential in conserving botanical remains and hence the prospects for future research (Hildebrand *et al*. 2010). Evident to this is the excavation at Kumali rock-shelter in Kafa has resulted in the detection of a substantial quantity of floral remains providing data on the vegetation history of the highland and evidence for plant utilization for the period covering the last 2000 years. The excavation also revealed the presence of such floral assemblages as Musacae (possibly *Ensete*

[24]The mid Holocene climatic change and environmental degradation were regarded as factors leading to the introduction of domesticated animals into the Horn of Africa (Bower 1991; Brandt 1984; Clark 1976; Phillipson 1977b).

ventricosum/domestic *Musa*) and two fragments of *Coffee arabica* seeds in levels above 1740 BP (Hildebrand 2003b; Hildebrand *et al*. 2010). This archaeological occurrence of coffee is considered to be the first on Ethiopian soil (Hildebrand *et al*. 2010: 284).The discovery is, indeed, a breakthrough in the study of an economically and historically significant Ethiopian domesticate although no associated material evidence have been recovered. Hence, addressing queries relating the process of domestication and material culture associated to the production and consumption of the plant is an alluring task.

Caliberated years	Archaeological evidence	Site
Undecided	Possibly domestic equids (71± 107 dating based on obsidian hydration)	Quiha rock-shelter
1st millenium BC	possibly domestic *Bous*	Gobedera rock-shelter (Aksum)
773-112 BC	Domestic *Bos;* caprines; wheat, barley; flax	D-site at Kidanemihret (Aksum)
781-406 BC	Possibly domestic *Bos* and caprines; barley; chickpeas	Lalibela cave
917 BC- 123 AD	*Bos taurus* and caprines; wheat, barley, lentils, flax and *tef* (wild?)	Ona Nagast (Aksum)
2136-1538 BC	Phalanges of domestic *Bos*	Lagaoda
2567-1056 BC	3*Bos* teeth(associated with undecorated pointed base pot)	Lake Beseka

Table 2.1. Summary of archaeological evidence for the earliest domesticated plants and animals in Ethiopia.

The data presented above have been drawn from different sources. Lalibela cave (Dombrowski 1971:112; 144-149); Gobedera (Phillipson 1977; 1993b); Laga Oda (Clark and Prince 1978); Lake Beseka (Brandt 1982: 261; Clark and Williams 1978); Quiha rock-shelter (Barnett 1999a; Clark 1988; Marshall 2000:197); D-site at Kidanemihret (Boardman 1999; 2000; Phillipson 2000:505); Ona Negast (Bard *et al*.2000; D'Andrea 2008). Dating of the archaeological evidence for each site except those from Quhia rock-shelter was established based on ^{14}C years BP, even though I have opted to use the calibrated years in the time scale shown here.

While archaeological study on coffee has just begun yielding valuable data on the apparent, yet unsubstantiated, exploitation of the plant, ethnoarchaeological studies on the cultivation and consumption of the plant is mostly lacking attention by professionals in the field. Though limited in its scope to the Mäcca (Maccaa) Oromo of west Wälläga, Bula's (2011) pioneering work on coffee's cultural value is worth mentioning. In this study, he illustrates the traditional use of coffee underscoring its binary function: coffee as beverage and coffee as food (*bunä-qäla*, butter encrusted roasted coffee). Accordingly, his work illustrates how the coffee tradition is allegorically intertwined with pottery technology and in what manner planting coffee is metaphorically viewed as clothing the earth and appeasing God (*Waaqa*) thereby indicating its environmental value and sacredness among the Oromo in west Wälläga.

We have so far seen the diverse source of data used to explain the origins of food production in Ethiopia. Note should, however, be made that evidence from rock art and linguistic are considered as problematical due to the difficulty to establish precise date and hence call for a further yet an extensive deliberation (see Bellwood and Renfrew 2002; Blench 2006; Brandt and Carder 1987; Diamond and Bellwood 2003; Dowson 1994; Ehret *et al*.2004; Harrower *et al* 2010:453). In terms of the approaches widely used to explain the origins of agriculture, Harrower and his associates commented on the challenges to discern allochthonous versus autochthonous influences resulting from incursions and local dynamics respectively. They also stressed the value of taking into account three alternative scenarios under which the processes could have occurred: "1) immigration of foreign pastoralists or farmers, 2) foragers independently domesticating local species and 3) foragers importing foreign domesticates'' (Harrower *et al*. 2010:454).The available literature on the origins of food production in Ethiopia, notwithstanding divergent views, implies an option of mixed allochthonous influence and autochthonous development.

2.4. Ethnoarchaeological Perspectives on Food Production in Ethiopia

As elucidated in the preceding section of the chapter, archaeological data on the origins of Ethiopian agriculture, albeit meager, suffice to disclose the antiquity of its roots. In spite of the fertile social and cultural conditions to allow ethnoarchaeological research, there are presently only a few ethnoarchaeological studies on agricultural origins in the region (D' Andrea *et al.* 1999). In connection with this, however, the last decade can be considered as the formative period in the emerging ethnoarchaeological investigations on Ethiopian cultigens (see D' Andrea and Lyons 1999; Gedef 2009, 2010; Hailu 2005; Hildebrand 2003a; Hiruy 2004; Tsehay 2012). In view of that, the role ethnoarchaeology

could play in supplementing the blurry archaeological data on the evolution of prehistoric agriculture has been stressed by several scholars (for instance, Haaland 1995; 1999; Muzzolini 1993; Phillipson and Reynolds 1996).

D'Andrea and his associates conducted an ethnoarchaeological research on cultivation, preparation and consumption of different crops, and studied domestic architecture and craft production in Tigray region. Their study attempts to demonstrate the prospects to explore effects of crop processing on the composition and preservation of archaeobotanical assemblages (D'Andrea, *et al.* 1999). A different ethnoarchaeological investigation on bread baking implies that indigenous crops were being exploited in Ethiopia prior to the introduction of Near Eastern crops into the region (Lyons and D' Andrea 2003). In his study in Tigray, Lyons (2007) attempts to trace construction, continuity and change of social identities through the study of local cuisine and its heat treatment technologies.

Such studies on contemporary society, agricultural methods in the cultivation of Ethiopian domesticates and associated technologies within a given social and ecological context have augmented the repertoire of our knowledge on the process relating the onset of domestication. Evidently, D'Andrea *et al.* (1999) and Hildebrand (2003a) note the value of ethnoarchaeology and ethnographic research in setting up a link between crops, the society cultivating them and the ecology in which they are grown. Additionally, ethnoarchaeology can aid to recap the process of selection that might have been carried out during domestication. Consequently, direct observation and acquiring information from traditional farmers and the selection processes that affect and effect morphological change can be understood (Harlan 1989; Hildebrand 2003b). Ethiopia's great potential for research into the origins of plant domestication and ethnoarchaeological studies was underscored in the work of Harlan (1969:313) whose note on agricultural methods of his period reverberate to date:

> We have in the Ethiopian center a survival of an entire agricultural system little changed from prehistoric times. Ancient methods of tillage, sowing, reaping, threshing, winnowing, dehulling and processing for consumption, all have been preserved as have the uses and attitudes of the people toward their ancient crops. It is as if a vanished world had been rediscovered by use of a time machine.

The

ethnoarchaeological studies alluded to the above authors have paid a great deal of attention to indigenous knowledge of Ethiopian domesticates in different parts of the country. Thematically, studies on the subject have largely focused on traditional farming practices related to local plants, the loss of which was considered as an impediment to the opportunity of getting familiar with the processes that might have involved in due course of domestication. In the next section of this topic, I will present the synopsis of the focus of recent ethnoarchaeological studies that have amplified our understanding of the beginning of early food production in Ethiopia. The focus, here, will be on four Ethiopian domesticates investigated ethnoarchaeologically: *ensät, noog, tef* and finger millet.

Hildebrand's (2003a) ethnoarchaeological study on the cultivation and consumption of *ensät* and yam among the Shäkko people living in Bench-Maji zone in southwest Ethiopia addresses the problem of plant domestication in the region. Through this ethnoarchaeological approach, she formulates a model considering extant morphological disparity between domestic and wild varieties of *ensät.* Her study revealed the potential subsistence strategies of pre-agricultural societies in southwest Ethiopia and the reasons that could have attributed to the pre-domestication intensification of prehistoric subsistence. She concludes that the trajectories in the evolution of food production relating *ensät* and yams differ from pathways of the chief grain and legume crops all over the world. This work appears to be a *magnum opus* of ethnoarchaeological literature on one of the ancient Ethiopian domesticates.

Ensät has also been investigated ethnoarchaeologically in a comparative study of food systems alongside cereals grown in Bui and its immediate surroundings in central Ethiopia (see Hailu 2005). The results of this study show existing differences in the size of home gardens between *ensät* and grain growing parts of the study area. Hailu further explicates the variation in material culture related to *ensät* and grain processing and consumption. Accordingly, he has confirmed the association between ceramics and *ensät* related diets, and a large-scale production and utilization of grinding stones in grain growing areas. This study has further demonstrated how dietary system influences the frequency and distribution of technologies relating food processing and preparation. Underscoring the contribution of the ethnoarchaeological study, Hailu (2005:107) re-iterates "the varied food processing and preparation equipment of the two [*ensät* and grain] systems and the diverse home gardens can offer information to archaeologists about the prehistoric food and food habits of the region." Although Hailu conducted his research in a small yet representative geographical area, he underscored the imperative need for a further comparative ethnoarchaeological

study in transitional zones to aid the formulation of a model that would have a wider application in the country. The archaeological implication of this study lies on its value of linking the findings with ancient food systems and subsistence strategies and the relations between environment, technology and social change.

Noog (*Guizota abyssinica*) is another Ethiopian domesticate that has been a subject of ethnoarchaeological enquiry by Hiruy (2004), who addressed queries relating traditional agricultural practices of the crop focusing on traditional farming practices and consumption of the oil yielding seed among farmers in different vicinities in Amhara, Tigray and Oromiya Regional States.[25] Major themes addressed in his research included the processing and use of *noog* and its wild relative, *mäc* (*Guizota scabra*(Vis.) Chiov.), the dietary use and cultural value of the plant as well as the material culture used in its processing. One of the most central contribution of this work, although begging for a realistic model, lies on the experiment conducted to investigate the effect of charring on parts of *noog* and seeds of *mäc.* Accordingly, the experiment demonstrated by Hiruy validated the underrepresentation of *noog* stems in archaeobotanical context as this part is exploited by humans in making fire and a comparatively better chance of survival of flower heads and essentially the lower part of flower heads dubbed as receptacles, which could survive temperatures as high as 350 ^{o}C. Likewise, the charring experiment on grains of *noog* and *mäc* witnessed one important characteristic: post-charring distortion in the form of fragility. Despite the presence of the potential to survive, grains remained detectable after charring under high temperature. The implication, as deduced from the charring experiment, is thus proof that the presence of the two grains in archaeobotanical contexts depends on depositional and post depositional factors. Hiruy's ethnoarchaeological study has also revealed the presence of consumption of *noog*'s wild relative, *mäc,* and thus embodies the prospect to study its processing based on which the process of domestication of *noog* could be dealt.

Aside from botanical studies on *Eragrostis tef*, ethnoarchaeological research on the crop was conducted with the aim of acquiring insights on the processes and decisions involved in the trajectories to the commencement of agriculture in Ethiopia. Gedef's (2009) research on this presumed Ethiopian domesticate has paid a great deal of attention to the stages in the cultivation of the crop, the implements associated with the cultivation process, the consumption strategies and the socio-cultural and ritual use of the plant among

[25] The vicinities studied by Hiruy (2004) are Shäwa-Robit (North Shäwa), Wärä-Illu (south Wällo), and Hamusit (south Gondär) in Amhara National Regional State, the environs of Indabaguna in west Tigray zone of Tigray National Regional State and the town of Wäbäri in north Shäwa zone of Oromiya Regional State.

farmers of three ethnic groups (Amhara, Agäw and Shinasha) living in Amhara Regional State. His study portrays extant technical differences in the processing of the crops and emphasizes the greater possibility of recovering materials associated with processing of the crop, chiefly grinding stones made for *tef* processing and griddles used to bake unleavened bread (*injära*) out of *tef*, which he reckoned as potential proxies to understand the exploitation of the plant in the past.

Likewise, ethnoarchaeological study on finger millet among farmers in west Gojjam of Amhara Region and Mätäkäl zone of Benishangul Gumuz, in northwest part of Ethiopia, has shown techniques in the agronomy of the crop and the dietary, socio-economic, cultural and medicinal values of the plant (Tsehay 2012). Analogous to the work of Hiruy (2004), the ethnoarchaeological study on finger millet also fails to put forward a pragmatic model to demonstrate the pattern of data observed in the study, but it outlines the impact of charring to test the likelihood of identifying seeds of finger millet in archaeological contexts. Based on laboratory experiment, Tsehay confirms the possibility of finger millet grains to endure various temperature and atmospheric conditions. The implication being tantamount to the work on *noog,* Tsehay's explanation on the archaeological implication of the charring experiment undermined the factors that effect and affect the archaeological record once site formation takes place.

CHAPTER 3

FIELD METHODS AND ETHNOARCHAEOLOGICAL THEORIES

> I don't like the distinction between theory and ethnography. There is a saying attributed to William James that you can't pick up rocks in a field without a theory. Ethnography is not simply 'data collection'; it is rich in implicit theories of culture, society and the individual.
>
> (Agar 1980:23)

In this chapter, I set out in detail the set of materials and methods employed in the preparation of the dissertation, and review ethnoarchaeological theories that abide the research and explain the way casting the net and access to appropriate people, organizations and places was realized.

3.1. Acquaintance with Southwest Ethiopia and Selection of the Study Areas

My first experience of working amid the people of southwest Ethiopia goes back to December 2005 when I partook in a three weeks excavation in Kafa. At that time I was a graduate student of archaeology with no prior acquaintance of the archaeological and ethnoarchaeological potential of the area. Seven years after that exposure, I decided to do a research for a PhD in the same part of the country. There are, indeed, three main reasons to pick *Coffea arabica* as the theme for this dissertation. These are (a) the presence of communities cultivating coffee in traditional ways and exploiting coffee growing wild in the forest, (b) the presence of a range of coffee-related artifacts in the systemic context, and (c) the fact that southwestern Ethiopia is purportedly the birthplace of coffee where traditional coffee cultivation and consumption persist to date.

Notwithstanding the shortfall of archaeological research in southwestern Ethiopia, the last two decades have witnessed emergent ethnoarchaeological studies focusing on the origins of Horticulture centering on one of the Ethiopian domesticates, *Enset ventricosum* (*welw.*) and investigations on paleoenvironmental

reconstruction of the Holocene of the region (see Brandt 1996; Hildebrand 2001; 2003a; 2003b; Hildebrand and Brandt 2010; Hildebrand, *et al.* 2010).

Although coffee has great cultural, economic and medicinal values, archaeological studies on the plant has, so far been, uncommon resulting in poor knowledge on ancient methods of cultivation, processing and diverse uses of coffee and the associated material culture. In the absence of archaeological data to explain about these agronomic and cultural aspects of the plant, it is imperative to undertake ethnoarchaeological study in southwestern Ethiopia where ancient methods of tillage, cultivation and consumption of the plant are common to date. At a time when rapid modernization processes are changing traditional aspects of the cultures of different communities in the country, the need to document and compare traditional coffee cultivation methods, consumption practices, and the production and use of coffee related technology from ecological and cultural perspectives becomes of the essence.

3.2. A Background Glance into Fieldwork: Sequential Summary of Field Activities and Experiences

Ethnoarchaeological fieldwork was conducted among three ethnic groups living in southwest Ethiopia: the Majangir and the Kafecho in Southern Nations, Nationalities and People's Region (SNNPR) and the Oromo in Gomma district of Jimma zone, Oromiya Regional State. After obtaining a research permit from Mr. Yonas Desta, Director of the Authority for Research and Conservation of Cultural Heritage (ARCCH) by the end of November 2012, I was able to get additional letters of cooperation from Mr. Alemayehu Aybera, Deputy Bureau Head and Core Process Owner of the Culture Study and Development of SNNPR at Hawassa. The letters from Hawassa were addressed to Kafa and Shäka zones of the Region. Similarly, Mr. Sisay Hirpo, Head of Human Resource of Oromia Regional Government Culture and Tourism Bureau, produced another letter of cooperation directed to Jimma zone. By the end of December 2012, all letters of cooperation issued by the bureaus had reached the zones in which the fieldwork was conducted.

When I conducted the first phase of the research (mid January- mid February 2013) among the Majangir living east of Teppi, I obtained a substantial support from Mr. Tekalign Tadesse and Mr. Leikun Berhanu of the Bureau of Culture and Tourism of the district of Yäki (Shäka zone) based in Teppi. My acquaintance with the area and selection of the study area was a result of discussion with the bureau on the practicality

to conduct the research. The Majangir in Yäki live scattered in 11 *qäbäles*[26] of the district. Consequently, I had to choose an area where they live in large number and where the cultivation of coffee and the production of coffee related pottery can be found. In terms of Majang population in the district, Addis-Berhan, Fide, Shay and Depi stand in the forefront. Among these, I found the Goji[27] locality of Addis-Berhan to be an ideal area to work for the environment, the economy, and the social milieu represent a typical present day Majang settlement.

My introduction to some basic Majang vocabulary is credited to my field assistant, Shama Mekonen, a Majang college student in Gambela, but native to the study area. The first time I met her in Teppi, I had to explain the overall plan and her role as an interpreter from Majang language to Amharic. In the first three days of my stay among the Majangir, I visited coffee farms, the spatial distribution of households and identified individual potters of the area. Then, we started the assessment of households for material culture related to coffee production and consumption, carried out interviews with family heads, conducted measurements of coffee-related pots and produced plans for activity areas and compounds.

In the course of research, I was able to learn more words and eventually acquire an elementary knowledge of Majang expressions although I fully relied on my interpreter for my interviews. My acquaintance with the Majangir community has significantly helped me to carry out the research with a relative ease and learn more about their culture. Every morning I travelled from Teppi eastwards to the Goji locality of Addis-Berhan *qäbäle* covering about 3-4 kms, I had opportunities to attend *kari*[28] ceremonies. I was, therefore, able to gain knowledge of their coffee culture and the procedures involved in the preparation and consumption of coffee. In the last two weeks of February 2013, my field-assistant and I were engaged in participatory observation of pottery production among six Majang potters and interviews with fifteen potters. We also visited coffee farms of individual Majang farmers, conducted interviews and observed coffee collection and processing techniques in Addis-Berhan. The last day of my stay among the Majangir was

[26] In Ethiopia, districts are subdivided into small administrative units known as *qäbäles,* the lowest executive body introduced in the aftermath of the 1974 revolution.

[27] The name Goji, often used by the Majangir living in the locality, constitutes part of Addis-Berhan *qäbäle* although principally inhabited by the Majangir.

[28] It is an infusion of coffee leaves boiled and drunk as a stimulant and is typical of Majang coffee custom.

spent in Meti, the capital of the Majang zone in Gambela Regional State, where I conducted market interviews with Majang potters from the surrounding areas.

During the interlude between the end of the first phase of research among the Majangir and the beginning of the first phase reconnaissance in Kafa zone (mid March to mid April 2013), I was engaged in exploration of literature on the environment, socio-cultural setting, and the cultivation of coffee in Kafa. Before getting on the Kafa fieldwork, Dr.Hassen Seid of the Institute of Ethiopian Studies (IES) in Addis Ababa had personally communicated my research schema to officers of Kafa zone in Bonga. Consequently, when arriving at Bonga, the paperwork to the districts of the study areas in Kafa zone was facilitated on the very day of my arrival. My travel to Mankira in Decha district was possible owing to the company of Mr.Asefa Gebremariam, a culture expert of the zonal bureau. It took us 15 minutes to travel 6 km by car from the outskirt of Bonga eastwards to a place called *gädam*[29]. After 30 minutes break at *gädam*, Mr. Asefa and I headed south to Mankira with a young boy between the age of 13-15 years who ran after a horse loaded with my baggage. Having travelled for 1 hr. and 40 minutes on a dry weather road paved between forested terrains drained by intermittent streams, we arrived at Mankira, the reputed birthplace of *Coffea arabica* in Kafa.

Having Mr.Asefa's company to Mankira was considerably important as I was introduced to the local officers who were explained about the purpose of my stay. I was also introduced to Mr. Melese Tadesse, an agricultural expert with whom I lived during my stay in Mankira. On my first night, he provided details on the area including some important words and sentences that I found valuable during my fieldwork in Kafa. On the next day, I was able to get Mr.Cänäqä Tadesse, who assisted me in interpreting my interviews and during the household surveys. I stayed in Mankira for a brief period of two weeks, as my sample size from the area was 20 households. Over the two weeks of my stay, I could carry out similar activities that I had accomplished among the Majangir near Teppi. Working in a rural area where there was no access to electricity, water and a hotel was a difficult and, perhaps, a risky undertaking though not an impossible endeavor. I totally relied on what Mankira could owe to its strangers. I shared morning coffee and ate with the people. By the time I left the area at the beginning of April, I was able to learn Kafecho ways of life, their

[29] *Gädam* is an Amharic term referring to a monastery and the place took the name after a nearby monastery, the Church of *Mädhanealäm*. Cars transport people and goods from Bonga to *gädam* and the vice-versa on market days.

social hierarchy and had an elementary knowledge of their language, kafinono, although it is mostly limited to greetings, time of the day and names of coffee related materials.

During the first five days of April 2013, I worked among the Kafecho in Boqa locality of the district of Adiyo. Mr. Worku Woldemariam escorted my travel from Bonga to Boqa, where we met Mr.Alemu Asefa, a young man who worked as an assistant during my survey of 10 households. My travel to Boqa was mainly to look into the material culture related to coffee processing and consumption and to document pottery production among Manno and Mäniyo subaltern clans living in the district. I was also able to document the production of *tinjano* (*tinjaanoo* also called *dolloo*), traditional coffee cups made of bamboo.

I spent the last ten days of my stay in Kafa with Mr. Habtamu Nuru, my assistant from the zonal Bureau of Culture, Tourism and Government Communication. During these days, we documented material culture related to coffee production and consumption, visited coffee farms and carried out interviews with farmers and family heads of 10 households in Qäja-Araba and Kaya-Kelo localities of the district of Gimbo. At the end of the fieldwork in Kafa, 40 households were studied.

I did the Jimma fieldwork in two rounds during mid 2013. In the first round (June 2- July 5, 2013), I conducted an inventory of coffee related material culture in forty households and interviewed household heads. I also made plans of sample activity areas compounds and visited coffee farms owned by farmers in Coce-Lämi locality and its adjoining areas in the district of Gomma. Through participatory observation, I was able to learn and document the stages in coffee processing, the preparation of coffee for consumption at household level. Simultaneously, I gained a better insight into the processes in the preparation of *bunä-qäla* and was able to acquire information on its cultural values. The second round fieldwork in Jimma zone was carried out between mid July and the beginning of the first week of August 2013. The principal activities carried out in the second phase mainly included documenting *chaîne opératoire* in the production of coffee related pottery products. The task was accompanied by interviews with potters in Gänji-Dalächo area of Gomma and Jiren locality of the district of Jimma to assess the social position of potters residing in the district. During the fieldwork in Jimma zone, my assistant, Mohammed-Hussein Siraj, and I worked in a similar fashion with Kafecho and Majang assistants in the study areas although he had no role of

interpreting the response from informants as I could interview my informants in the vernacular language and hence could easily record their replies with relative ease.

Phase II of the ethnoarchaeological study took place between mid June and mid July 2014. The major activities during this period included measurement of coffee and *kari* pots, preparing plan of sample compounds and field observation. During phase III of the study (between the end of July and the end of October 2014), an experimental study was conducted to understand the post-depositional preservation of coffee in pits dug in the three study areas of July. Recovery and water sieving of coffee beans took place after three months by the end of October.

Common to all the three study areas is the fact that samples of potsherds were collected from the sites and geo-referenced. Samples of potsherds come in different forms from abandoned houses, residential compounds, home gardens, farmlands and midden sites. Interviews were conducted based on a set of questions included in the questionnaire annexed at the end of this dissertation. Note should be made, here, that the questionnaire served only as a template in generating information. An array of questions pertaining to the subject under investigation were raised in the course of participant observation, which resulted in the generation of new data, incorporated in the dissertation.

3.3. Sources

The dissertation is written based on primary and secondary sources. Primary data used in this dissertation were obtained through ethnoarchaeological fieldwork among the Majangir, Kafecho and Oromo living in Shäka and Kafa zones of Southern Nations, Nationalities and People's Region (SNNPR) and Jimma zone of Oromiya Regional State. Methods involved in the process embrace participatory observation, interviews; measurements, photography and drawings, all of which can be comprised under the rubric of ethnoarchaeological field methods. The description of the sites, the material culture and the environmental setting is ascribable to my personal observation. Aside from these, there are unpublished materials obtained from the regional bureaus of culture and tourism, which provided important data.

As part of the research, consulting secondary sources relatable to the study was an essential task, especially while preparing literature review and adopting methods used during ethnoarchaeological fieldwork. Secondary sources have also remained an integral part in the write up of the dissertation where

appropriate annotations have been made to corroborate data obtained from ethnoarchaeological fieldwork. For this purpose, I mainly relied on sources at the Institute of Ethiopian Studies (IES), articles in journals and books.

3.4. Methods of Data Acquisition

The research combines use of ethnographic field methods of interviews, participant observation and common archaeological procedures for recording sites, structures, features and artifacts. To aid recording of archaeological materials, applicable forms were deployed particularly in documenting coffee-related pottery, tools employed in the cultivation, harvesting and processing of coffee. While sites were geo-referenced using Global Positioning Systems (GPS), drawings were used to plan compounds, delineate activity areas and parts of residential area with the aim of assessing organization and use of space.

3.4.1. Ethnographic Field Methods

Two approaches were used in collecting data through fieldwork: systematic problem oriented ethnoarchaeological research and polar methods as stipulated in the work of David and Kramer (2001). In systematic problem oriented ethnoarchaeological research in southwestern Ethiopia, specific ethnoarchaeological questions on the production and the consumption of coffee were addressed by gathering detailed information from households through interviews where as polar methods employed participant observation, which according to David and Kramer (2001) demands the investigator to stay in the field for a reasonable period. Consequently, participant observation was employed in all of the study areas, and has contributed to a better understanding of the agronomic, social and technological aspects addressed in the dissertation. The importance of participant observation in getting firsthand experience from people of a given study area has been stressed in the works of Ember and Ember (2004). Accordingly, ethnographic data related to coffee production and consumption were acquired in this way, as well as techniques in the production of pottery and insights on aspects of other material culture concerning the topic under examination. In due course of ethnographic fieldwork, data that revealed new topics of interest were obtained through informal interviews by taking note of conversations during the course of fieldwork. This was, principally, of great importance at the beginning of participant observation through which both qualitative and quantitative data were generated. As regards this, Spradley and McCurdy (2003)

recap that the motive in applying this ethnographic method in the field is to generate behavior and interpret experience of the community being studied.

Participant observation among the people in the study area took much of the time spent in the ethnoarchaeological fieldwork mainly because such activities as acquisition of clay sources required for the production of coffee related pots, drying, firing and post firing treatment of pots as well as harvesting and processing of coffee required direct involvement of the researcher. In the process, there was development of relationships with the people, which, in turn, allowed me to gregariously put myself into what Crang and Cook (2007:37) call "…every day routines of the community…'' Thus, participant observation in preparation of holes for coffee seedlings, harvesting and processing coffee, quarrying and transporting of clay to make pots as well as firing coffee-related pots have significantly contributed to understand the world view of the people and to meet the objectives of the research.

Aside from qualitative and quantitative data obtained from fieldwork among three ethnic groups living in the study area, unstructured interviews and questionnaire based structured interviews were conducted with informants. Two criteria of fundamental importance stated by Crang and Cook (2007), personal expertise or position of the informants within the communities to be studied were taken into consideration while collecting data about the origin of the people. While data on the cultivation, harvesting, processing and consumption of coffee as well as its cultural and medicinal values were gathered based on participant observation and interviews, knowledge on the production of coffee-related tools and some aspects of the culture of the people were obtained from potters, religious leaders and elderly people familiar with particular practices respectively.

I interviewed three groups of people in the study areas: women and men in each of the households inventoried, artisans and people with special position in the communities (elders with reputation for their knowledge of culture and history of their respective areas and ritual experts). My interviews were accompanied by household inventories for material culture related to coffee processing and consumption. In the early stages of questionnaire based structured interviews, I could only finish interviews in three households which in subsequent days improved to four or even five households partly because I and my interpreters in each of the study areas could easily communicate ideas to the interviewees. I experienced this during interviews among the Majangir and the Kafecho where my assistants, Shama and Cänäqä had

to interpret the reply of the interviewees from Majang and Kafinono to Amharic respectively. Nonetheless, the Jimma household interviews were held without an interpreter, as I am a native speaker of *afaan* Oromo, the language of the Oromo. This had, largely, contributed to minimize the time spent on interviews.

Aside from structured interviews, I conducted informal interviews when I was visiting coffee farms and when I participated in coffee processing, preparation and consumption stages. Most of the questions raised included queries, which required verification on local terms used to refer to names of plants, tools related to coffee cultivation, processing and consumption, and technical terms and tools used in production of coffee pots and coffee cups.

I have now realized that getting information from interviewees through an interpreter, *per se,* is not a problem, it is rather the uncertainty that strangely occurs in recording things that interpreters tell. Although my interpreters were both native speakers of Majang and Kafinono, every time I had doubts on terms, popular aphorisms or even interpretations on some replies, I sought for confirmation from the interviewees or get validations by raising related questions to avoid any deformation of ideas. Although some of the Majang and Kafecho interviewees wanted to reply in Amharic, I insisted that they use their native language for fear that elementary knowledge of a second language could deter the opportunity of gaining detailed explanations. In fact, I met a few young Majang and Kafecho informants who could speak very good Amharic, and hence interviewed them without interpreter.

3.4.2. Archaeological Field Methods

All households assessed in this study, midden sites from where samples of potsherds were collected and cultivation fields were geo-referenced using Global Positioning Systems (GPS) to plot the sites in the map of the zones where the study areas are located. Apart from these, charts, graphs and tables are deployed to present statistical information on the pattern of distribution of artifacts.

An over view of the study areas and materials related to coffee production and consumption as well as surface collection of potsherds were photographed. Another important concern of the research, although limited to techniques of manufacturing material culture relating the topic, involved observation in the field, and classifying and interpreting materials used in the production, processing and consumption of coffee. In contrasting style of material culture relating coffee production and consumption, similarities and differences

in assemblages and internal dynamics in the systemic context and examination of assemblages showing stylistic variation and those that mark cultural relations were thoroughly examined.

Household inventories were carried out for the purpose of identifying materials related to the cultivation, processing, and consumption of coffee. Photographing and measurements of coffee-related pots were carried out following household interviews. Women were asked to display coffee-related artifacts and responded questions related to their price, choice and use. Measurements of dimensions of coffee- related pots were taken using a tape measure and a digital caliper. Results of the measurements are expressed in millimeters (mm).

Measurements were also taken for household and compounds from each of the study areas using tape measure. In doing so, the perimeter of compounds was traced on graph paper. Samples of potsherds of coffee related artifacts were collected and recorded. In assessing the use of space in a household, the different sections of a living room was traced on graph papers and were enhanced using Adobe-Photoshop.

3.5. Sample Size and Sampling Strategies

The ethnoarchaeological study has assessed 110 households in the three study areas (30 households among the Majangir and 40 households each for the Kafecho and the Jimma Oromo). In the case of the Majangir in the vicinity of Teppi, cluster sampling was used since the method helps to avoid wasting time in reaching scattered units of habitation. Such data collection is applicable for sampling populations for which there might be no convenient document listing names of individuals or household heads. This sampling strategy used, here, remarkably accords with the nature of Majang settlement pattern known from historical documents (see Stauder 1968; 1971; 1972). For study areas in Kafa and Jimma, I employed a combination of random and purposeful sampling, particularly in assessing households and coffee-related material culture.

3.6. Ethical Considerations

Field assistants who aided in interviews and field observation were selected by considering such factors as gender, language and academic background. Induction was given on field ethics and methods to be

applied in the field. Compensation in kind was made to informants who are also acknowledged for their contribution to the work at the end of this dissertation. Ethical standards used during fieldwork respect the stipulations outlined in the Code of Ethics of the American anthropological Association.[30]

3.7. Beneficiaries and Impacts

The results of the ethnoarchaeological study on coffee production and consumption, among others, can be used by researchers in the field of archaeology. Professionals in the field and related disciplines can use the results of the research as an important input in dealing with the history and culture of southwest Ethiopia. While academic institutions will use the results of the research for educational purposes, different institutions and particularly bureaus of culture and tourism and researchers in related disciplines in particular can use this work as a reference material to make development schemes and to conduct further studies.

The research is deemed to promote knowledge on culture-history of coffee in Ethiopia in general and southwestern highlands in particular. Simultaneously, it will also enhance archaeological understanding on ancient cultivation, processing and consumption of coffee. It will also help to create awareness about the agricultural heritage, improves protection of the cultivar and will aid future efforts in the documentation of indigenous knowledge on cultivation, processing and use of coffee. The local people in the study area will benefit from the research as the promotion of their culture and indigenous knowledge on the cultivation and consumption of the plant contributes to the growth of awareness about their own culture.

3.8. Theories and Fundamental Concepts in Ethnoarchaeology

In this section of the chapter, we shall first see the meaning and development of ethnoarchaeology as a sub-discipline of anthropology, the use of ethnography in interpreting archaeological remains and the role of ethnographic analogy, its limitations and general theory in ethnoarchaeology.

[30] The document is available at www.aaanet.org/committees/ethics/ethicscode.pdf

3.8.1. The Origins and Growth of Ethnoarchaeology

A wide range of definitions have been provided for the term ethnoarchaeology (see for instance, Gould 1978c; Khan 1994; Kramer 1996; MacEachern 1994; Schiffer 1978). Nonetheless, a cross cutting notion, in the definitions attributed to the above authors, is that ethnoarchaeology involves the blending of ethnography[31] and archaeology and it generally investigates human behavior and the material, spatial and environmental context in which it originates. In this dissertation, I have decided on to use Schiffer's description that ethnoarchaeology refers to "the study of material in a systemic context for the purpose of acquiring information, both specific and general, that will be useful in archaeological investigation" (1978:230). This ethnographic study of living cultures for archaeological reasons has been at the center of recent elucidations of ethnoarchaeology by David and Kramer (2001).

The origin of ethnoarchaeology is related to the orientations in archaeological research. As regards this, Willey and Phillips (1958) concisely describe that the mid 1950s were characterized by the archaeological concern to address a range of questions that go beyond cultural chronology. These included studies on the nature of patterning in artifact assemblages and the organization of cultural variety in time and space, essentially phases and cultures. To David and Kramer (2001), the development of ethnoarchaeology as a sub-discipline is attributed to the growing recognition of the importance of ethnographic materials based on which analogies could be constructed. Situating ethnoarchaeology within the milieu of related sub-disciplines of anthropology, David and Kramer (2001:2) further explicate that ethnoarchaeology defies any criteria to be considered either as a theory or a method. Instead, they reflect up on it as a research strategy embracing diverse approaches aimed at understanding the association between material culture and culture as a whole in a systemic context, and as it joins the archaeological record. Its purpose is to utilize such data to enrich archaeological concepts and eventually improve archaeological analysis.

The principal task of ethnoarchaeology is to augment the archaeologists' understanding of alternative human behaviors that might have occurred and it helps to make logical archaeological interpretations.

[31] Ethnography aids in the explanation of archaeological material by placing them in a cultural context. Their integration can be expressed through what Julian Steward said, "If one takes culture-history as his problem, and peoples of the early historic period as his point of departure, the difference between strictly archaeological and strictly ethnographical interests disappear" (Oswalt 1974).

Even though extinct cultural systems might not exhibit resemblance with those found presently or documented in modern times, the starting point for inference is still the ethnographic present (Gould 1978a). Patterns of ethnographic behavior are consequently required to be judged against patterns of artifacts, ecofacts and features from archaeological occurrences (Gould 1974; MacEachern 1996).

Several scholars (for example, Binford 1962; Binford and Binford 1968a; Clarke 1968) draw parallel between the commencement of ethnoarchaeology and the growth of processualism, with the beginning of New Archaeology in the 1960's. Processualism distinguished itself from the previous culture historical approaches with the deliberation that archaeology, aside from its pervasive role in the description of artifacts, can efficiently be employed to reconstruct past human behavior. Processualists argued that this can be realized using the scientific methods and philosophy of the natural sciences to the archaeological record, particularly those environmental and economic aspects of human behavior that are most open to scientific testing. The above sources indicate that processual study seek for explanations of the human past using controlled variables, quantitative methods, hypothesis testing and eventually, aims to generate cross-cultural generalizations about behavior.

A considerable growth in ethnoarchaeology was prompted owing to wider recognition of processualism amid archaeologists, chiefly due to the growing importance placed on what came to be known as middle-range research. In this connection, Lewis Binford is recognized as a leading figure in the development of middle-range theory to establish two central schemes "a) how we get from contemporary facts to statements about the past, and b) how we convert the observationally static facts of the archaeological record to statements of dynamics" (1977:6). Accordingly, relating the dynamic behaviors of contemporary societies to the static material products created by those behaviors is a foremost challenge dealt through ethnoarchaeology.

Using contemporary societies as laboratories for the formulation of hypotheses to be judged against the archaeological record is the foremost goal of processual ethnoarchaeological research. Although details of the results of ethnoarchaeological case studies conducted employing this basic approach cannot be presented here, the research by several scholars (for instance, Binford 1978a;1978b;1980;1981;Gould 1971;1980; Watson 1979a; Yellen 1977) fall within the category of processual ethnoarchaeology carried out in diverse environmental and geographical contexts. Recent studies that accord with the processual school

of ethnoarchaeology include the work of Arthur on pottery tradition in southwestern part of Ethiopia (Arthur 1997; 2002; 2003; 2006; 2013; Roux 2003a; 2003b; 2007).

David and Kramer (2001:14-17) identified three periods in the development of ethnoarchaeology. The initial period of ethnoarchaeology covers the period from 1956-67 with two major areas of concern: the value of analogy in archaeological interpretation and the evaluation of existing interrelationships amid the archaeological, ethnological, ethnographical and historical approaches to the past. It is, however, with the emergence of Lewis Binford's New Archaeology that the need for models of human behavior from which to formulate and test hypothesis in the archaeological record became imminent. This encouraged the use of ethnoarchaeology. The second phase (1968-81) is the "New Ethnoarchaeology" period during which scholars put accent on the significance of formulating a model that would serve as the basis of testing hypothesis against archaeological data. It was during this period that Africa, and in particular, Sub-Saharan Africa became a favored zone of ethnoarchaeological investigation. In the recent period beginning from 1982, Ian Hodder theorizes that artifacts are symbols in action that reflect and constitute culture (Hodder 1982). The period also witnessed an increase in the productivity of non-Western ethnoarchaeologists trained in Western anthropological tradition (David and Kramer 2001). Evidently, the emergent literature on ethnoarchaeological topics by Ethiopians (for example, Gedef 2009; 2010; Temesgen 2006; 2008; 2009; 2010; 2011) is a relatable to the recent changes in the orientation of ethnoarchaeological research in the country.

Several other ethnoarchaeological studies (for example, Cameron 1993; Hodder 1982; 1987; 1991; Kent 1993; Lane 1994; 1996; 1998b; 2011; Tomka 1993) were conducted in postprocessual context of the "New Archaeology" period. Post processual ethnoarchaeologists (for instance, MacEachern 1996) have stressed the significance of collaborating with local communities while conducting ethnoarchaeological research.

3.8.2. Analogy and Analogical Inference in Ethnoarchaeology

Analysis, in archaeology, is commonly comparative. Comparison is inevitable as it helps to better understand the archaeological record, and this is accomplished by contrasting the unknown object with a known object for the purpose of understanding variation in time and space (Smith and Peregrine 2012:5). The very notion of known and unknown is related to source-side and subject-side of analogy to be elaborated in the forthcoming section of this chapter.

At the heart of ethnoarchaeological research is analogy, which allows the blending of archaeological and ethnographical data for interpretation (Oswalt 1974). Lyman and O'Brien (2001) describe analogy as a form of reasoning that attempts to make inferences about an unknown subject based on shared similarities with a known source, or analog. Indeed, the term analogy itself can be elaborated from the perspectives of logic and anthropology. In logic, analogy presumes that if two items share resemblance in certain attributes, they will also be similar in other respects though not necessarily in all attributes. The anthropological stance of defining analogy constitutes concepts that would help the creation of categories of analogous divisions that would assist to make inferences (Durrenberger and Morrison 1977; Beauchesne 2005:24). Analogy is, thus, the basis for analysis of archaeological finds. In interpreting the scanty archaeological record, archaeologists use an array of data obtained through their own life experience, observation and reading. Nonetheless, common sense, which is founded on the archaeologist's cultural background and worldviews, is inadequate to base analogies about the behavior of other past cultural groups (David and Kramer 2001). Consequently, ethnographic analogies, specifically made through ethnoarchaeology, provide a more complete context to know about cultural processes and the structure and function of prehistoric societies rather than the archaeological record alone (Stanislawski 1974).

The philosophical logic of analogy was in use earlier than the development of ethnoarchaeology itself (Charlton 1981; Orme 1974; 1981; Wylie 1985). The manipulation of ethnographic data to interpret archaeological findings is generally traceable to the 17th century. Subsequently, cognizant of the value of ethnographic analogy, attempts have been made to standardize its application in archaeology. The diverse sources that provide ethnographic data for ethnoarchaeological application come from ethnographic accounts and descriptions of travellers, but mainly through ethnographic fieldwork. Even then, the application of such data to the archaeological record calls for direct comparison with archaeological findings and the formulation and testing of archaeological hypotheses (Stiles 1977).

Generally, analogy is considered as the basis of archaeological explanation. To Oswalt (1974) analogy, in ethnoarchaeology, is simply the assignation of cultural purpose to artifacts, evaluating the unobserved[32] behavior in reference to the observed one, which is central to the comparison. It is implied that a specified

[32] What archaeologists cannot observe directly entails the link between material and behavior as well as associated variables. As it is practically impossible to explain the way things occurred in the past, reliance on what we know in the present through analogy is a viable resort to the problem (Wylie 2002).

meaning given to an object by people can be inferred as the meaning of a similar artifact. These implications are more valid in the existence of cultural continuity. Analogy, is therefore, “a form of inference that holds that if something is like something else in some respects it is likely to be similar in others”(David and Kramer 2001:1).

Aside from its application to artifacts and sites, analogy can also be applied to cultural groups. On the other hand, analogical inference makes the most of contemporary or historic ethnographic observations to the analysis of archaeological features. Ethnographic comparisons are made based up on the assumption that the culture under observation performs in a similar way as the historic or prehistoric period, and thus has been unaltered by the passage of time. The premise that accords with this postulation is that modern 'primitive' cultures have themselves evolved and advanced from the archaeological time under investigation. In view of this, Frederik Fahlander argues that there have never been any societies operating unchanged and 'out of time' (Fahlander 2004: 193).

As it has been underscored earlier, interpreting the scanty archaeological record involves use of archaeologists’ own life experiences, observations and readings. Nonetheless, common sense based on the archaeologist’s cultural background and worldviews, is inadequate to base analogies about the behavior of other cultural groups in the past. Aside from the limitations of common sense based reflections emanating from personal experience, an array of historical and ethnographic data from different parts of the world could no more be taken for granted as an up to standard foundation for analogical inference to cultures of distant past. This is owing to the limited plausibility of analogical extrapolation to peoples living in remote past, places and contexts, and because descriptions of others either paid little interest to their material culture or emphasized the typical material culture present whereas archaeological remains vary in time and space thus providing clues to past socio-cultural behavior (David and Kramer 2001).

Notwithstanding the value embodied in analogy, however, three central questions have become contentious in relation to its application for archaeological reasons. These queries raised and addressed by Patrick Beauchesne are “a) how do we use analogy? b) how are similarities and differences chosen? c) how much does the present inform us about the past? and the vice versa” (Beauchesne 2005:24). Therefore, in utilizing present day data for analogical reasons, and as a theoretical tool to get insights about the past, there is a need to apply analogy at practical and theoretical level, and to curtail biases resulting

from “social metaphors and narratives” with which analogy is very much related (Beauchesne 2005). It is also imperative to create valid analogical arguments taking into account dissimilarities in attributes to avoid simple analogy (logical fallacy) that could result if only similarities are amplified (Beauchesne 2005; Wylie 2002).

A further point in making analogy is the need to pay attention for relevance. It means that a logical and determining structure suffices to make a good analogy and, hence, a total causal relationship is not a requirement (Beauchesne 2005; Weitzenfeld 1984 cited in Wylie 2002). Given the fulfillment of the above conditions in analogical reasoning, therefore, a logical conclusion should be drawn in light of the number and strength of the premises (Beauchesne 2005; Wylie 2002).

Making inferences about the past based on ethnographic analogies requires understanding the distinction between the logics of deduction and induction. As regards this, Kelley and Hanen (1988) explore the use of scientific methodology in archaeology, beginning with the difference between deductive and inductive inference. Concomitant to this, David and Kramer exemplify deduction with the following logical structure: “All birds have wings. Aristotle is a bird. *Therefore*, Aristotle has wings” (2001:44). In cases of deductive inference, if the premises are correctly deduced, then the truth of the conclusion is definite.

Conversely, in an inductive inference a conclusion is not necessarily dictated by its premises. Therefore, it lacks conclusiveness. Note should be made, here, that analogy is a form of induction, and thus inconclusive. In syllogistic argument where three or more premises are used, as in the following logical formulation, the conclusions drawn from the premises might not essentially be true:

Coffee berries have caffeine content.
Coffee berries have stimulating effect.
Coffee is an aromatic beverage
Flushes (i.e leaves of tea plant) have caffeine content and stimulating effect, and are aromatic beverages.
Therefore, flushes are coffee berries.

The above example illustrates the indefiniteness in induction. The conclusion drawn is false because flushes are leaves of a tea plant. In other words, a particular subject (in this case, flushes) may share

several traits with a source or an analog (i.e. coffee) with which comparison has been made. In reality, flushes, though stimulant like coffee, have other distinct features. Analogical inferences are, therefore, subject to flaws as the claim for a high degree of similarities is magnified in the conclusion drawn from premises entailing analogues traits (i.e flushes vs. coffee cherries). Hence, learning how to employ analogy for archaeological reasons is an alluring task. Particularly, while itemizing similar attributes between ethnographic source of analogy and the archaeological subject under investigation, it is worth to pay attention to the underlying attributes to be contrasted. In view of that, Wylie (1985) indicates that conclusions based on inductive, analogical reasoning are never certain, and this is a common critique of the use of analogy in archaeological inference.

Because analogical inference is often subject to a degree of uncertainty (Stahl 1993), the works of several scholars (for example, Ascher 1961; Charlton 1981; Wylie 1985) have highlighted the value of minimizing this uncertainty. The idea is further strengthened by an important précis of Wylie that stresses the significance of making a logical inference of the past through "working to establish the principles of connection-the consideration of relevance that informs the selection and evaluation of analogies" (1985:101). Hence, analogical inference, demands reinforcing the source and subject-side parts of the analogy (Stahl 1993).

Prior to the discussion on three major arguments suggested as points of objection to the use of analogical inference in ethnoarchaeology, there is a need to look into structural forms of analogy. Therefore, we shall first discuss what have been referred as "Four–place analogies" principally applied in anthropological research (Beauchesne 2005; Durrenberger and Morrison 1977). The nature of this type of analogy expounded by Beauchesne takes the form "A:B :: C:D, A:B :: B:C, and A:B ::C: B" which is read as A relates to B as C relates to B(A r B = C r B). In the above stated four-place analogy, the grouping designated as A and B are referred as subject-side where as the C and B represent subject-side context. The four place analogy that takes the structure A: B:: C: B is frequently used in ethnographic analogy and hence of archaeological application. In this correlation, cultures A and C are comparable owing to commonly shared attribute, B. Accordingly, inferences of meaning for certain objects or practice from past cultures can be made given the presence of analogous objects or practices in contemporary cultures. Note should be made, here, that drawing proper relations between subject and source-side contexts demands testing the relevance of analogy using archaeological (empirical) evidence (see Beauchesne 2005:26).

The application of analogies in interpreting the archaeological record has been regarded as indispensable in archaeological enquiry (Ascher 1961; Gould 1980; Gould and Watson 1982; Orme 1973; 1974; Peregrine 1996d; Stahl 1993; Wylie 1985). This is owing to the difficulty to directly understand how and why the diverse sets of archaeological data (artifacts, ecofacts and features) are created. Since these data do not "speak by themselves," interpreting them based up on ethnographic analogies has been a feasible approach ever since the birth of the discipline (Peregrine 1996d). The application of ethnographic analogies have, however, been disputed between groups of archaeologists who either embraced or rejected its application, most archaeologists in the past and the present stand in between the two divergent views and strongly adhere to the deployment of ethnographic analogy for archaeological interpretation (Peregrine 1996d). The major objections to the use of analogical inference boil down to three major areas. These are subject-side and source-side limitations of ethnographic analogy (i.e fallacy of affirming the consequent) and the limitations relating subject-source resemblance. In the subsequent paragraphs, we shall see, one by one, these major areas of objections and the reasons provided as justifications.

In Gould's view, the first objection to analogical inference is related to the problem of projecting present day experiences and observations to the past and the vice versa. Therefore, analogical inference is criticized for committing the fallacy of affirming the consequent. According to the logical structure of this fallacy, for example, if coffee pot type "A" was used during a ritual ceremony in the past (i.e in this case indefinite historic period), then it will be used during a ritual ceremony in a modern day context. Coffee pot type "A" is used during a ritual ceremony in a modern context; therefore it was used for the same purpose in the past. Gould (1978b:254;1980:30) further highlights the inherent self-limiting nature of such simple ethnographic analogies as they are merely capable of identifying earlier occurrences in the presence of evidence with a known analog but unable to help interpretation in cases when archaeologists come across evidence with no known analogs. This apprehension of Gould was also shared by Watson (1979a:1; 1979b:287), who warns against the flawed presumption that ethnographically known life ways stand for the whole range of human behaviors and applying these explanations on remains from archaeological sites with no sufficient testing. This same theme was elaborated by Simms (1992:191) when he scrutinizes that prehistoric systems may not be embodied within modern analogs and may, in fact, be "previously unknown, unimagined", and even 'counter-intuitive.'

A second point of objection to analogy presented by Gould and Watson is linked to the difficulty to rely on the degree of similarity between subject and source. The idea, here, is that "No amount or number of resemblances can confirm a single case" (Gould and Watson 1982:374). In connection with this, Gould draws attention to the difficulty of assuming basic principles based on shared similarities between subject and source. In other words, ethnoarchaeologists lack way of knowing with the assurance whether similarity symbolize relational analogies. As Gould puts it, "Arguments by analogy, in other words, beg the question of what it is that structures the resemblances one is attempting to explain" (*ibid.*:373). From Gould's point of view, resemblances are just "interesting coincidences" unless some uniformitarian principle is applied. As a final point, he accentuates that ethnographic analogy is valid, although limited since it can never in fact discount contending hypotheses (*ibid.*:374).

A third objection to analogy is that we can never account for variability based up on resemblances between subject and source alone. In a summary of his first criticism, Gould argues that ethnographic analogies are self-fulfilling and that we must apply some kind of framework to elucidate the variability that occurs. For example, he suggests that analyses based on the discernment of uniformitarian processes (for example, studies of human ecology) are a better framework for explaining why ethnographic and archaeological models conform to or deviate from expectations than merely "collecting and adding up resemblances" (Gould and Watson 1982:375). Gould (1980) refers to his approach as "argument from anomaly" to set it apart with argument from analogy, and he concludes that ethnoarchaeology must include "a willingness to recognize the value of anomalies and to use them as a primary tool for discovering behavioral relationships that may have no equivalent in any contemporary or known historic human societies" (1980: xii). In summary, Gould (1980: x) is against the application of simple analogies based on ethnographic observations to explain archaeological findings.

In a rather different stance from Gould, Watson provides a counter argument in support of the use of analogy in ethnoarchaeology, based on the premise that analogical reasoning is the theoretical basis of all archaeological interpretation. She further explains that the entire set of historical sciences including archaeology begin with the operating postulation that the past is knowable, even though it is not directly noticeable. Her overall argument is based on the verification that "we can achieve knowledge of the real past by applying empirically-based techniques within a general framework of argument by ethnographic analogy" (Gould and Watson 1982:359). In a similar fashion with Thompson (1958), Watson argues that

direct (specific) historical analogies are stronger than general comparative analogies, but that ethnoarchaeologists must approach all ethnographic analogies as testable models or hypotheses, rather than confirmed interpretations. Thus, she views the simple analogies discounted by Gould (1978b; 1980) as simply the beginning of a systematic process of hypothesis testing, in which the associations suggested by these analogies must be contrasted against the empirical reality of the archaeological record (Gould and Watson 1982:363; Watson 1979a:3; 1979b:278; 1980:56). Watson refers to the whole process as "argument by analogy" (Gould and Watson 1982:360).

As opposed to the above position held by Gould, Kent (1987a) does not claim to be against analogy, but supports a very limited role for ethnographic analogy in ethnoarchaeology. Her principal concern was that analogy should not be seen as equivalent to, or the main function of ethnoarchaeology. Kent further considers ethnographic analogy as a starting point for the particular identification of cultural materials and functional interpretations, but argues that it cannot provide conceptual explanations or understandings, such as economic and technological organization. In its essence, Kent's suggestion goes in line with Watson's (1979a) reflection of ethnographic analogy as a method of generating hypotheses, not conclusions.

The dichotomy between Watson's argument for analogy and Gould's argument against analogy is almost exclusively reliant on how each portrays analogy (Wylie 1982). Gould proceeds from a narrow lexical definition of analogy, which presents analogy as a listing of apparent similarities or "resemblances" between archaeological subjects and ethnographic analogues (Gould 1980:29; Gould and Watson 1982:371). Whereas Gould disagrees with Watson's "expanding the concept of analogy to stand for 'hypothesis-to-be-tested" (Gould and Watson 1982:376), Watson maintains the broader view about analogy by citing its application in logic, philosophy, and archaeology (Gould and Watson 1982).

Wylie (1985:80) described all analogical inferences are ampliative, which denotes that they are eventually inductive and, subject to be erroneous. Consequently, deductive certainty is unachievable in archaeological inference. Hence, Wylie proposes that analogies cannot be judged as valid or invalid [33](1982:394; 1985:97) but must be assessed right from the outset along a scale from "weak[34]" to "strong." She argues that this

[33] Fischer (1970:247) refers to expectations of exact connection between subject and source as the "fallacy of perfect analogy.[33]"

[34] To Wylie (1985) weak analogies are those that consider only similarities, but not differences, and/or those that assume that

weak form is the focus of Gould's criticisms of analogy. In contrast, Watson's positive evaluation of analogy is based on a continuum of analogy that includes strong analogies. Strong analogies are those that (i) reflect on both similarities and differences between subject and source to more accurately decide the degree of similarity and (ii) those in which the similarities in the premise are a relevant basis for inferring additional resemblances in the conclusion (Wylie 1982:394). Therefore, both Watson and Gould have the same opinion in their rejection of weak analogies, and a large part of their differences in approach is terminological (Gould and Watson 1982). Wylie concludes her explanation by contending that ethnoarchaeologists cannot substitute analogy, but should broaden and refine the idea of analogy, and work to improve the relative reliability of analogical argument (1982:400).

3.8.3. General Theory and Theory of Practice in Ethnoarchaeology

The course of developments in archaeology during the latter half of the 20th and into the 21st centuries were crucial for the rise of theory in ethnoarchaeology. In terms of broad theoretical trends, this can be described as processualism, postprocessualism,[35] and approaches that attempt to blend the best characteristics of both. Postprocessualism has encouraged greater self-awareness and objectivity among processualists and helped to limit simplified application of methodology in natural sciences to the complexities of human behavior (David and Kramer 2001). Conversely, processualism has encouraged optimism about the degree to which the past can be known, and has effectively applied proven methodology of science to enquiries pertaining to human prehistory (Redman 1991). Even though many American archaeologists are "generally processual" or have "postprocessual leanings," Hegmon (2003:216) argues that theoretical allegiance is not a defining issue. She further suggests that postprocessual emphasis on agency, gender, and meaning have been steadily integrated into the processual mainstream, there by constructing a category dubbed as "processual-plus." This compromise effectively mingles processual objectives and methods with a greater awareness of postprocessual critiques. Relating this

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partial similarity between subject and source implies similarity in all respects.

[35]Preucel (1995) considers postprocessualism as one aspect of a larger body of theoretical perspectives within the social sciences. To Hodder (1985;1986) the name "postprocessual" is an umbrella term to link archaeological theory with postmodernism and to propose that it transcends processualism. Theoretical approaches under processualism entails contextualism (Hodder 1986;1987), later refined to interpretive archaeology (Hodder 1991; Preucel and Hodder 1996), critical archaeology (Shanks and Tilley 1987; 1989; 1992), and its specific aspects neo-Marxism (Leone 1982) and gender archaeology (Conkey and Gero 1991; Conkey and Spector 1984), among others.

pragmatic approach to the application of general theory in ethnoarchaeology, David and Kramer (2001:61) write: “While we must strive towards in-depth understanding of particular examples of human cultural diversity, this need not conflict with ultimate comparative and generalizing goals”

In light of the diversity of goals, applications, and results discussed above, the major point of debate has centered on whether or not ethnoarchaeology would benefit from amalgamation under a single body of general theory (Cunningham 2003; David and Kramer 2001; O’Connell 1995; Simms 1992). Simms (1992) suggests behavioral ecology as one general theory capable of guiding ethnoarchaeology beyond the criticisms of “obnoxious spectator” or “trivial pursuit,” and argues for an integration of middle-range and general theory, since general theory can profitably direct the development of middle-range questions. Comparably, O’Connell (1995) argues that ethnoarchaeology excels at middle-range research specifically; documenting variable relationships between behavior and artifacts, but without reference to a unified theoretical framework, and it cannot explain or predict this variability. Along with others, he advocates for the application of neo-Darwinian behavioral ecology to ethnoarchaeological studies, allowing them to test coherent, theoretically derived predictions and generate robust interpretations (Kelly 1995; O’Connell 1995; Simms 1992).

Others recognize the uses of general theory in ethnoarchaeology, but question the idea that it should be unified under a single high-level theory (Cunningham 2003; David and Kramer 2001). David and Kramer characterize ethnoarchaeology as primarily a research strategy and suggest, “it may well be that different kinds of behavior are best explained by different theories” (2001:41), and they propose that scholars need only be explicit about what general theory is being employed in their research and why. In connection with this, Cunningham (2003) argues that “processual pluralism” in ethnoarchaeology is preferable to be amalgamated within a theoretical framework, whether that framework is material culture studies, human behavioral ecology, or any other paradigm. Cunningham (2003:405) states that ethnoarchaeology should maintain its diverse middle-range focus and work with, rather than against, its diversity.

Another important concept in ethnoarchaeological studies is the theory of practice. Practice approaches, in archaeology, have direct relevance for research on cultural transmission as they stress the link between practice and social reproduction, as well as historical contingency and evaluate how people constitute their world and cultures through practice. It is also related to hermeneutics (i.e. the interpretation and

understanding of material through the analysis of possible meanings or social use). This can be done by scrutinizing modern values embodied by artifacts, which is used as a basis to get clues on their possible meaning in the past (David and Kramer 2001).

3.8.4. Direct Historical Versus Cross Cultural Comparative Approaches

Interpreting archaeological data has always involved the manipulation of ethnographic data (Bloch 1953 cited in Peregrine 1996d) although the formulation of systematic methods to its application came lately in the 1950s (Wylie 1985; Peregrine 1996d). Among the pioneers who first put forward a systematic method in constructing analogies was J.G.D Clark(1951) who later (in 1953) pointed out that ethnographically known cultures with analogous subsistence technologies and environmental context with a certain archaeological culture of interest provide the foundation for analogies. After three decades, the approach suggested by Clark was named "neo-evolutionist" by Wylie (1985:71). It was named so because the roots of the approach was deeply related to the earlier method of drawing analogies from cultures in similar positions within an evolutionary typology, but including the notion that environment may perhaps play a significant role in molding cultural forms of a society (Peregrine 2001).

The idea proposed by Clark was also taken up and further elaborated in a succinct manner by Robert Ascher who suggested "direct-historic"[36] analogy as a more appropriate approach than a neo-evolutionist perspective. By direct historical analogy, Ascher meant that known ethnographic cases could be used as a starting point to draw parallel with the archaeological culture being interpreted (Ascher 1961:323-324). He also noted that, in places where there is cultural continuity, aspects of prehistoric cultures could be expected. Direct historic approach, a method analogous to Ascher's direct historic analogy, had been in use in North America for over five decades (Trigger 1989). In pre 1950s, the interest in chronology resulted in the use of two instances of direct historical cultures (i.e. General comparative analogy and specific historical analogy). In general comparative analogy, there is no noticeable evolutionary relation between archaeological subjects and ethnographic subjects. On the contrary, there exists detectable evolutionary link between prehistoric and ethnographically documented cultures. Accordingly, it is possible to construct chronologies, assess ethnic affinities of prehistoric cultures, and use known ethnographic descendant cultures as analog to their ancestral cultures (Lyman and O'Brien 2001). The approach, even if questioned,

[36] The term was the first used by Wedel (1938) but was later described in different ways by several scholars (for example, Stocking 1987; Strong 1935; 1953).

proposed that archaeologists could base their interpretations of the archaeological record by working back from historically known cultures into the unknown past. The most important critics to the approach lies on the danger surrounding interpretive [perhaps due to inductive characteristic of analogy] errors that could result as one tries to create a link between the present and the remote past (Trigger 1989).

One of the principal uses of direct historical approach is related to its use in assigning ethnic identity to archaeological phenomenon (Willey 1953b:372). This explanation was further sustained by Lyman and O'Brien who looked upon cultural continuity as a fundamental theoretical foundation of direct historical approach. They, however, remarked the difficulty surrounding the notion of cultural continuity as a concept that begs the question "where is there continuity in the first place?'' The reason to explain the said cultural continuity is the process of "cultural transmission" that provided the basis of Willey's "cultural continuity" which expressed practically in coinciding cultural attributes known historically and documented ethnographically (Lyman and O'Brien 2001:310).

Employing direct historical approach as a means of ethnic identifier rests upon analogous nature of artifacts documented from historical and prehistoric periods (O'Brien and Lyman 1999; Lyman and O'Brien 2001). In distinguishing the ethnic affiliation of a given archaeological culture, two types of criteria have been set forth: (i) identical geographic origins and (ii) typological identity or similarity of artifacts (See Lyman and O'Brien 2001). Based on identification of prehistoric artifacts from identical geographical area with those known from ethnographic context, it is possible to conclude that the same ethnic group that produced the former produced the latter (Sapir 1916 cited in Lyman and O'Brien 2001). In terms of application of the criteria, there have been differences in using them for different scenarios. In some cases, both criteria were used separately. A case in point is the use of a single criteria approach that has been provided by Lyman and O'Brien (2001). Accordingly, in contrasting the spatial extent of cultural units defined archaeologically with known distributions of ethnic groups recorded historically, it is, perhaps, possible to make a logical deduction that ethnic groups of similar geographical distribution had created the archaeological units. Still, Lyman and O'Brien uphold the idea that the assessment of the resemblance of artifacts as a procedure often deployed in identifying cultural traits for analogy.

The use of direct historical approach transcends its application in demonstrating ancestor-descent relationships illustrated in the preceding paragraphs. A secondary, yet crucial, use of the approach is

related to its application in constructing temporal sequences. This involves establishing a chronological order of artifacts starting with the theoretical notion of sorting cultural features (traits) belonging to a historically known culture and working back into the past by detecting types of artifacts in a culture represented archaeologically (Lyman and O'Brien 2001).

Cultural Traits

Trait Lists	1	2	3	4	5	6	7	8	9	10	11	12
E*	+	+	+	+	+	+	+	+				
D	+	+	+	+	+	+	+		+			
C	+	+	+	+	+	+			+	+		
B		+	+	+	+	+			+	+	+	
A		+	+	+	+					+	+	+

* Trait list known to date/ historical period

Fig.3.1. A model showing the use of direct historical approach as chronometer (adapted from Lyman and O'Brien (2001:313).

In figure 3.1 above, Lyman and O' Brien (2001) employed the concept of sorting to establish temporal sequence of lists of cultural traits. While each column signified by a number represents a corresponding cultural trait, each row comprises a trait list. The marks indicate the presence of a trait. From a chronological perspective, each lower row embodies archaeological cultural traits earlier than those known from historical period (i.e. row E). Basic assumptions that underpin the application of the direct historical archaeology have been set forth by Lyman and O'Brien. These are: (i) the magnitude of traits shared by prehistoric cultures with their descent cultures in historic period declines progressively as one works farther back in time, and (ii) the coinciding traits in chronologically different but transmittable cultures in a temporal sequence bonds them in time and the connection represented by the overlapping traits demonstrates a line of heritable continuity embracing an evolutionary lineage (2001:314).

Besides direct historic analogy, archaeological researches have made extensive use of cross-cultural comparative approaches, which could either be synchronic or diachronic comparisons. The concern in synchronic cross-cultural comparisons is the stipulation of material correlates of behavior and limited

"causal and non-causal[37]" relationships that enable inferring behavior from archaeological remains. On the other hand, diachronic cross-cultural comparisons have been deployed in charting and analyzing the evolution of culture. It is clear from the above elucidation that both synchronic and diachronic studies differ in terms of time and theme while employed in investigating culture/s. Thus, the main focus in synchronic study is bounded to a particular moment of time where as diachronic study is concerned with the evolution and change over time of a particular culture (Peregrine 2001).

Peregrine (2001) further explains the advantage of employing a cross-cultural comparative approach describing the difficulty to interpret archaeological remains as one of the fundamental problems archaeologists experience. This is due to the fact that such set of data as artifacts, eco-facts and features do not come to light by themselves in meaning and their purpose is unclear as they are recovered from archaeological context and thus, cross-cultural comparisons are considered as an efficient means of making the archaeological data speak. With regard to the application of cross-cultural approach, two fundamental assumptions have been suggested: (a) that cases for contrasting are drawn from a statistically valid sample representing the entire range of variation in the subject of interest and (b) that the units of analysis are analogous (Ember and Ember 1988; 2001). Aside from these postulations, it is imperative to depend on the use of inferential statistics to decide empirically extant relationships (Ember and Ember 1988; 1995; 2001).

Aside from the above stated major types of approaches deployed in ethnoarchaeological studies, Ascher elaborates two kinds of analogy often used in archaeological studies, direct historical analogies and new analogy. The former presumes the existence of historical continuity between ethnographic and archaeological sources and selection of analogues does take into account boundary conditions with no presupposed historical correlation. In the latter case, Ascher (1961:319) supplements such variables as modes of subsistence, environmental setting and technological adaptations. Selecting analogues based on these factors along with other critical aspects of culture (for instance, social and political organization)

[37] Causal and non-causal associations denote circumstances in which a variable can be applied to forecast variation in another (Ember and Ember 1995: 97). On one hand, causal associations indicate a causal connection between the variables (i.e. that variation in one causes variation in the other), whereas non-causal associations suggest either direct or inverse yet a simple co-variation existing between them. In archaeological interpretation, if it is confirmed that two variables have significant associations in a diversity of cultures, it would then be difficult to argue that the same relationship would not hold for prehistoric cultures as well (see Wylie 1985: 101).

amplify the interpretative power of the analogy (Stahl 1993; Wylie 1988). These criteria are considered by Wylie (1988: 136-137) as relevant postulations and can vary from explicit theory to insightful ideas about the links between diverse aspects of culture. In constructing analogy, similarity in certain attributes of ethnographic and archaeological cases is considered as an indication of broad similarities and this is considered by Stahl as *illustrative* analogy. The principle that links the ethnographic and archaeological context is the source of illustrative power of an analogue. In other words, both the ethnographic and archaeological cases should denote a parallel evolutionary stage and share a geographical setting. In connection with this, a crucial advantage of illustrative analogy lies on its ability to shed light on less accessible aspects of the past although it precludes the role an analogue could play in revealing important differences in the past (1993:236). This drawback of the analogy has led some authorities (for example, Gould 1980; Thompson 1956) to the contention that analogy simply projected ethnography into the past.

On the other extreme of the spectrum, there are scholars (Gould 1980:35; Wylie 1985:107) who accentuate on the imperative need to focus on dissimilarities between ethnographic and archaeological cases, which are thought as useful approaches to distinguish existing differences between the past and the present. Due to this, Stahl (1993) considers analogy as a comparative model. However, how can the relationship between ethnoarchaeology and archaeology be explained?

Ethnoarchaeology deploys ethnographic data to address archaeological problems. In doing so, both material and non-material aspects of a living culture are synchronized to aid the reconstruction of the past. There are indeed certain cross cutting issues that characterize both ethnoarchaeology and archaeology. First, both target at reconstructing past ways of life that we call “culture”. Second, from a methodological perspective, ethnoarchaeology deploys such ethnographic methods as examining material culture of living people, participant observation and interviews. While ethnoarchaeology inevitably uses ethnographic data to get insights into how people lived in the past, it also uses archaeological methods of recording and analysis of artifacts. The employment, to a certain degree, of ethnographic data in interpreting archaeological finds has also been known from the early periods of the discipline of archaeology. Third and finally, they both study material culture and create link between humans and objects as expounded by Skibo and Schiffer (2007). Although both complement each other, an overt difference between them lies on the production and use of analogy: ethnoarchaeology produces analogy that can be used by archaeologists in interpreting the past.

The use of ethnographic analogy in African archaeology is indisputably indispensable. In this regard, the nature and caution to be taken in the application of analogy in the continent has been remarked by Lane (2005:26-27) who stresses existing trends in applying Direct-Historical analogy by drawing parallels between archaeological sites and living cultures in particular areas. Initially, the approach regarded spatial associations in the distribution of past and contemporary populations as "sufficient justification for inferring temporal continuities.'' A rather more critical point of view developed with the rise of the "New Archaeology" in 1960s and 1970s on the need for greater caution in the application of ethnographic analogies was suggested owing to the critics that analogy projects the present into the past-a point of reaction against the use of analogical reasoning.

Now, I switch on to some important concepts to be elucidated from my own stance: analogy, contextual archaeology and the application of processual vs. postprocessual approaches in ethnoarchaeology. The application of analogy is inescapably significant to make a logical deduction on such aspects of the past as techniques involved in the production of artifacts, the social organization under which such artifacts came into use and the possible use of archaeological materials, notwithstanding other archaeological methods, compared with those from ethnographic present. In view of that, the likelihood of making a plausible analogical inference depends on shared attributes between comparable items considered from ethnographic present and that of archaeological context. The value of this ethnoarchaeological study, in this context, is producing analogies pertaining coffee-related material culture, chiefly coffee and *kari* pots. From the perspectives of contextual archaeology, the identification and understanding of meaning attached to coffee pots in the social context of the three communities under investigation (Kafecho, Majangir and Oromo) involves the examination of coffee rituals among the three groups.

I also view the application of nomothetic approach and generalization to be context specific. Since the inherent nature of nomothetic approach aims at establishing general laws applicable to a varied population, it fails to indicate specific properties of a given trait across cultures. For instance, the *chaîne operatoire* in the production of coffee pots among one of the three groups cannot wholly be used to establish general laws to the entire group of potters as an entity chiefly because specific properties peculiar to a potter belonging to a potter could be discounted. For example, in comparing techniques applied by a Mänjo potter from Kafa and a Majang potter from Goji near Teppi, one finds it difficult to generalize about the production levels, as certain differences noticeable across potters among the two groups could be disregarded.

Likewise, generalization posits the existence of a domain or a set of elements as well as one or more common attributes from a sample to an entire population. Hence, it could be used as a basis of a valid deductive argument.

In this ethnoarchaeological study, the application of contextual approach is mainly limited to the identification and study of the contexts in which meaning is attached to coffee pots, the way coffee is prepared and consumed, the position of coffee pots within a household and the manner coffee related rituals are perceived. Besides, the study employs processual approach to deal with the way potters among the three ethnic groups (Kafecho, Majangir and Oromo) produce coffee pots and coffee griddles, the processes that result in breakage and eventual discard of potsherds. The approach also helps to scrutinize the processes, which lead to the transition from systemic to archaeological record based on assessment of the pattern of discard in ethnographic context. Besides, the difference in the role of gender, a theme in the study of coffee cultivation, processing and consumption can be explained from a postprocessual stance.

CHAPTER 4

THE BOTANY OF COFFEE

In this chapter, I deal with an essential component of the dissertation-the botany of coffee based on secondary sources. In doing so, I put accent on the taxonomy and physical description of the plant. For this purpose, I have heavily relied on published sources dealing primarily with the botany and chemistry of coffee and the meager annotations in various works. For the sake of perspicuity, I have only focused on central aspects of the botany of the plant relying on a range of data from botanical studies on the plant although the illustrations used in the description of parts of coffee tree are mainly from my own fieldwork in southwest Ethiopia. Towards a better understanding of the subject, I have sought to use original sources in the field although some explanations referred here come from my own observation.

Notwithstanding the existence of a variety of coffee species within the genus *Coffea,* two principal species, *Coffea arabica* and *Coffea canephora* are extensively grown and consumed. The former is favored over the other varieties owing to its better quality (Charrier and Berthaud 1985; Ukers 1922; Van der Vossen 1985). *Coffea canephora,* widely known as *Robusta*, is indigenous to western and central Sub-Saharan Africa and thus, grows in a large area extending from Guinea to Uganda and southern Sudan-a region often referred as the rainforest of equatorial Africa (Cobley 1976; Van der Vossen 1985). A third species - *Coffea liberica*- is native to Liberia though it is insignificant in terms of the volume of production and is noted for the poor quality beverage (Cobley 1976; Ukers 1922).

Historically, the first description and account of coffee shrub was made at the close of the 17th century based on dried branch of the plant brought for the first time from Mocha in Arabia Felix by Mr. Edward Clyve (Sloane 1694:63). The following picture, albeit without details, has historical significance as it portrays some of the physical aspects of the coffee tree. In the forthcoming paragraphs of this section, the salient features of the botany of the plant are presented.

Key

A. The shrub
a. The fruit growing
B. One of the leaves
C. The fruit of the true size
e. The fruits with the outward husk taken off
i. The berry with both the husks off

Figure 4.1. The earliest drawing of parts of a coffee tree (after Sloane 1694:63).

From botanical perspectives, the first description of a coffee tree was made in 1713 by A.de Jussieu. Based on his study of a single specimen from the botanic garden of Amsterdam, he named the coffee shrub-*Jasminum arabicanum*, a nomenclature, which in 1753 was designated by Linnaeus as *Coffea arabica*-the only species known at that time (Charrier and Berthaud 1985; Wellman 1961). Wellman (1961: 29-30) notes that the appellation of the species *arabica* owes much to the overwhelming conviction that the specimen studied by botanists of the period had its origin in Arabia even though travellers of the period proposed Ethiopia as a place of origin. In his publication of 1753, therefore, Linnaeus coupled Ethiopia with Arabia by way of reflecting his sentiment that the origin of this plant had to do with Ethiopia.

4.1. The Taxonomy of *Coffea arabica*

The taxonomy of the genus *Coffea* is deemed very complex (Charrier and Berthaud 1985:13). Nonetheless, this genus consists of about 60 species although all of them are defined less evidently. Most members of the genus *Coffea*, the characteristics of which is indicated in table 4.1 below, are trees or sub-shrubs of the tropics although herbaceous species used to grow in temperate zones(for example, Galium with *Rubia tinctorum* L. (see Berrie 1977:149). *Coffea arabica* is categorized under the *Rubiaceae* family, which embraces around 400 genera of trees and shrubs. The species is self-pollinating, though a certain degree of cross-pollination occurs through the agency of insects (Cobley 1976:204). The table below demonstrates the major taxonomic levels and distinguishing features of each level to which *Coffea arabica* belongs.

No	Taxonomic levels of coffee crop		Remarks on the characteristic features
1	Kingdom	*Plantae*	Multi-cellular, autotropic, eukaryotes (Bold *et al.* 1980; Ukers 1922)
2	Sub-kingdom	*Angiospermae*	The plant reproduces by seeds enclosed in a box-like compartment known as ovary located at the base of the flower (Ukers 1922).
3	Class	*Dichotyledoneae*	The stem of this class increases in thickness by means of a layer of cells (cambium) which is a tissue that continues to divide throughout its existence (Berrie 1977; Ukers 1922).
4	Order	*Rubiales*	An order of dicotyledonous plants with opposite leaves (Ukers 1922)
5	Family	*Rubiaceae*(*madder*)	The family is characterized by its simple opposite leaves and by the fusion of the sepals (Berrie 1977; Bridson and Verdcourt 1988; Cobley 1976; Wellman 1961).
6	Genus	*Coffea*	Most members of the genus *Coffea* are trees or sub-shrubs of the tropics although herbaceous species used to grow in temperate zones (for example Galium with *Rubia tinctorum* L. (Berrie 1977:149; for the nomenclature relating the gens, see Carvalho 1952; Cobley 1976; Davis *et al*.(2006), Grassias and Kammacher 1975;Monaco 1968;Ukers 1922; Wellman 1961; Wickzer 1951).
7	Species	*C.arabica*	It is a coffee variety mostly cultivated for its beans. It chiefly grows in tropical regions although temperate climates also favor its growth (Cobley 1976; Ukers 1922; Wellman 1961).

Table 4.1. Major taxonomic levels of *Coffea arabica L.*

Several scholarly works produced by botanists and historians (for instance, Anthony *et al*. 2001; 2002; Charrier and Berthaud 1985; Cobley 1976; Fernie 1966; Harlan 1969; Huffnagel 1961; Labouisse *et al*. 2008; Mesfin 2008; Meyer 1965;1968; Monaco 1968; Pankhurst 1961;1968; Porter 1833; Smith 1985; Ukers 1922; Wellman 1961; Wrigley 1988) point towards the Ethiopian origin of *Coffea arabica.* Other group of scholars (for example, Charrier and Berthaud 1985; Friis 1992; Mesfin 2008; Monaco 1968; Thomas 1944; Zerihun 1999) shore up the view that the natural home of this species of coffee embrace the Boma plateau[38] in southeastern Sudan and perhaps Mount Marsabit[39] in northern Kenya. Although these parts of Africa are considered as the natural habitats of "wild coffee", the southwestern Ethiopian highlands have been dubbed as the center of diversity of *Coffea arabica.* In fact, botanists who have explored the region have also noted the difficulty to find truly wild populations of the crop (see Anthony *et al.* 2002; Friis 1979; Meyer 1965; Sylvain 1955; Von Strenge 1956).

The plethora of theories linking the origin of *Coffea arabica* with Ethiopia based on circumstantial historical facts, *per se*, does not suffice to ensure the claim. If so, what other set of evidence buttress the historical verification on Ethiopian origin of coffee? Proof confirming the historical link between coffee and Ethiopia also comes from genetic studies. Accordingly, cytogenic evidence confirms that *C. arabica* is the only tetraploid[40] species in the genus *Coffea.* The diploid[41] meiotic behavior and the fact that its center of genetic diversity is situated outside the area of distribution of the diploid coffee species, indicate an allotetraploid origin (see Carvalho 1952; Charrier and Berthaud 1985; Grassias and Kammacher 1975).

From geographical perspectives, the southwestern forests constitute the main eco-region of *Coffea arabica* (Tadesse 2003:21) although the humid forests of both the southwestern and southeastern highlands of the country are considered as the birthplace and home of this species (see Tadesse 2003; Tadesse and Feyera 2008). The historical assertion linking the origin of coffee with Ethiopia has also been backed by a

[38] In secondary forest growing at Boma plateau, Thomas (1942:207-12) discovered wild *Coffea arabica* growing with no human intervention.

[39] Charrier and Berthaud (1985:20) noted the difficulty to assert if these ''semi-wild'' coffee trees grew wild or brought from Ethiopia in early times.

[40] A cell or nucleus containing four homologous sets of chromosoms, one from each parent (Parmacek and Epstein 2009).

[41] A cell/nucleus containing two complete set of chromosoms, one from each parent (Parmacek and Epstein 2009).

firm scientific ground as the existence of genetically diverse strains of this species has led scientists to hold on to the idea that Ethiopia is a center for origin, diversification and dissemination of the plant (Bayetta 2001; Fekadu 2013; Fernie 1966). Concomitant to this, Labouisse *et al.* (2008) consider the forest-coffee of southwest Ethiopian highlands as comprising the highest genetic diversity.

An agro-morphological study by Montagnon and Bouharmont (1996:221-227) pointed out that coffee trees found east of the Rift Valley (i.e. southeastern and southern Ethiopia) could, perhaps, be either introduced from the southwest or collected from the local forests long before their destruction. Genetic studies using RAPD (Random Amplified Polymorphic DNA) molecular markers point toward the presence of a comparatively modest genetic distance between the southern and southeastern coffee trees and southwestern coffee trees (Anthony *et al.* 2001:63; Labouisse *et al.* 2008:1084). This buttresses the proposition that "southern and southeastern coffee trees were not selected from wild coffee growing locally but introduced from the southwest. These introductions could have occurred recently" (Anthony *et al*. 2001:63). Note should, however, be made that the genetic isolation between the southwestern and southern Ethiopian coffee trees is not a result of the tectonic rift as DNA based phylogenetic studies (Cros *et al*. 1998; Lashermes *et al.* 1996b) suggested a recent origin of the genus *Coffea*[42]. Accordingly, the coffee colonization of Ethiopia perhaps occurred after the formation of the Great Rift Valley. The above postulation is further supported by environmental data suggesting change in the vegetation history of the area to east of the Rift (Anthony *et al.* 2001; White 1983) and the isolation for a long period of the kingdom of Kafa until the turn of the 19th century (Anthony *et al.* 2001; Meyer 1965; Von Strenge 1956). Despite that, Kafa was part of the trade route that united the region with the Red Sea and hence the movement of coffee from the region to the adjoining areas in the Horn and farther beyond was not a chimera.

[42] Recent DNA study has revealed that the origin of *Coffea* goes back only 400,000 years ago. This chronology invalidated a hypothesis postulated in the 1980s that "the current distribution of coffee in Africa, Madagascar and up to India suggests the presence in East Africa of ancestral forms, which would then have been isolated by the breakup of the Gondwana supercontinent, 100 million years ago." Thus, molecular clock to estimate the age of *Coffea* by use of DNA sequences of a species of a related genus (*Rubia*), traces the origin to the Upper Miocene (Institut de Recherché pour le Development [IRD] 2010).

4.2. The Physiology of Coffee

In this section of the discussion on the botany of coffee, I present the fundamental morphological constituents of the plant, *Coffee arabica L.*, a variety that grow well in tropical regions (see Berrie 1977; Cobley 1976; Ukers 1922 ; Wellman 1961). The primary focus, here, is on the trunk, leaves, flowers and fruits of the plant correspondingly. The presentation of data on the physiology will be elaborated in the forthcoming chapter dealing with the cultivation and consumption of coffee.

A. Orthotropic vs Plagiotropic Shoots

The principal attributes in the shoot structure of *Coffea arabica* have been elucidated by different scholars (see Berrie 1977; Cannell 1985; Cobley 1976; Kumar 1979; Reffye 1981 and Snoek 1976 in Cannell 1985; Stemmer *et al.* 1982; Ukers 1922; Wellman 1961). Accordingly, two structural features of coffee shoots have been discerned: the axil (the upper angle between a leaf stalk or branch and the stem or trunk from which it is growing) consisting a series of buds, and that branching is diamorphic. Both the vertical (orthotropic) and horizontal (plagiotropic) branches produce buds. While the orthotropic shoots produce more plagiotropic branches from the topmost head of series buds, the lower buds go on as dormant or produce more shoots or inflorescences (Arndt 1929; Berrie 1977; Cannell 1985; Cobley 1976; Stemmer *et al.* 1982; Ukers 1922; Wellman 1961).

Naturally, nodes on plagiotropic branches can also develop into more plagiotropic branches though not into orthotropic[43] shoots (Cannell 1985; Kumar 1979). The fact that the laterals may perhaps send out other lateral branches is a very useful trait as the flowers are produced on the laterals, which seldom appear on the upright (Berrie 1977; Cobley 1976; Ukers 1922). It is on this part of the tree that coffee beans are produced from flowers.

[43] Although unconfirmed, there are reports on the use of morphactins to grow orthotropic shoots from plagiotropic branches (Kumar 1979:113-114).

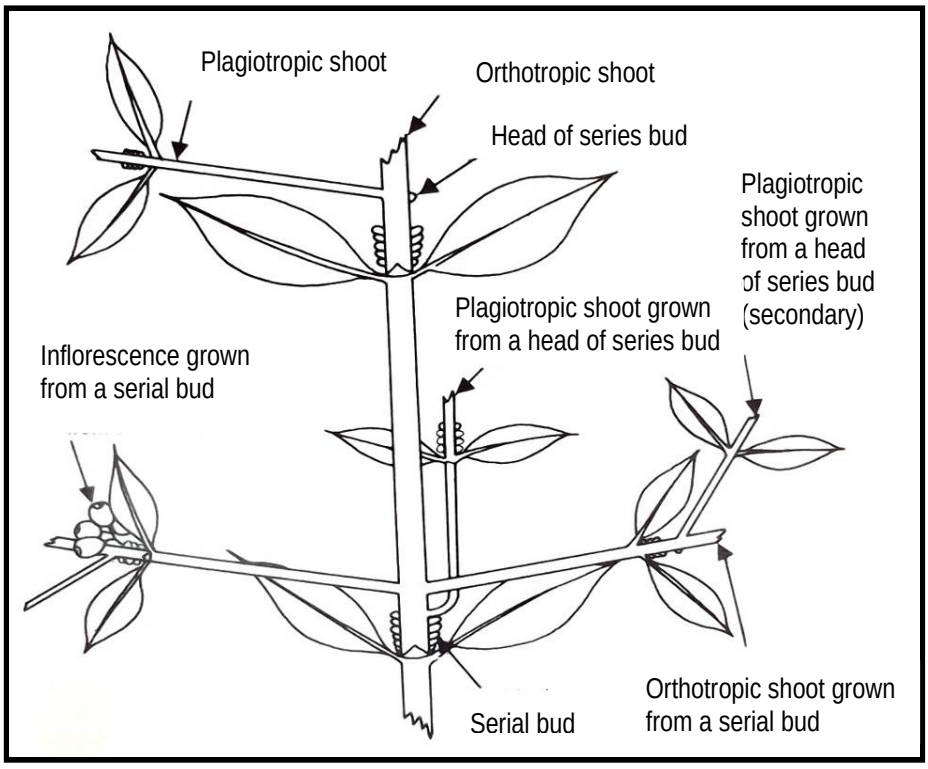


Figure 4.2. Shoot morphology of *Coffea arabica* (After Cannell 1985:113).

In traditional coffee cultivation system in southwest Ethiopia, farmers cut the lateral (plagiotropic) branches of young coffee seedlings to allow ''a rapid growth of the coffee trees.'' I was also informed that cutting the tip of a vertical (orthotropic) stem of a young coffee tree accelerates the growth of lateral (plagiotropic) branches on which coffee beans grow out of blossoming flowers on the branch. Farmers in the study areas, therefore, control the height of coffee seedlings to maximize the advantage obtained from lateral branches i.e. branches that yield coffee beans.

Figure 4.3. A Majang farmer weeding a two years old coffee seedling.

B. Coffee Leaves, Flowers and Fruits

Analogous to the branches in the shoot system, coffee leaves are arranged in opposite pairs with a small leaf-like attachment to a leaf, typically borne in pairs at the base of the leaf stalk (Berrie 1977). They blend very dark green on the upper surface, and much lighter surface underneath. They are characterized by exclusively wavy edge margins. The indigenous people in some tropical countries brew a coffee-tea from the leaves of the coffee tree (Wellman 1961). In this regard, a concoction from coffee leaves constitutes an important part of the coffee consumption habits in Ethiopia. Particularly, the Majangir, the Konso[44] and the Oromo of Hararghe have long been using coffee leaves either as a primary or secondary[45] part of the

[44] The consumption of coffee leaves is also known among the Konso, who prepare *Xolla*- an infusion prepared from grounded dried roasted coffee leaves and boiled with such ingredients as garlic, *tjalataa (Lamiaceae* family), *Kirdiffayya* (*Ocimum americanum);* and sunflower. They boil the paste in hot water by mixing it with salt. The Konso believe that it has medicinal value in fighting malaria and stomachache (Tebaber Chane, PhD student at Addis Ababa University, pers. com.17 Sept. 2015).

[45] This dichotomy between "primary and secondary'' coffee denotes the primacy given to either coffee beans or coffee leaves to prepare and consume coffee.

coffee consumption tradition. The Majangir in southwest Ethiopia who rely on coffee brewed from leaves regard this infusion known as *kari* as a first class coffee although the consumption of the beverage prepared from beans in recent years is only in the making and hence, secondary. The details on the coffee consumption habits in southwest Ethiopia are treated exhaustively in chapter ten of this dissertation.

Flowers, essential components in the reproduction of coffee, emerge from lateral (plagiotropic) branches (Cannell 1985:114). Flowers of the genus *coffea* are generally characterized by overt irregularities in many respects. There is variation in the number of petals ranging from four to more than nine, a condition that depends on the species and variety of coffee. Stemens have filaments attached towards the middle of anthers and are inserted in or below the throat of the corolla. Compared to *Coffea canephora* and *Coffea liberica*, the pollen grains in *Coffea arabica* are relatively heavy and sticky and not so readily distributed (Wellman 1961).

Flowers of *Coffea arabica* are representative of the genus *coffea* as they consisted of short corolla tube, long style and stamens. Such morphology would let natural cross-pollination, although *Coffea arabica* is fundamentally autogamous (self-pollinating) (Carvalho *et al*. 1969; Charrier and Berthaud 1985; Monaco 1968; Wilson 1985a). The coffee flowers are tubular and usually white in color, whereas the flesh, stamens and pistils can have a greenish tinge, and in some cultivated species, the corolla is pale pink (Wellman 1961). The flowers are very redolent and are in axilary cymes of up to twenty. Flower buds, which are not provided with sufficient water, will open to give a departure flower, which has vestigial anthers. These are called starflowers and are often entirely green (Cobley 1976:151).

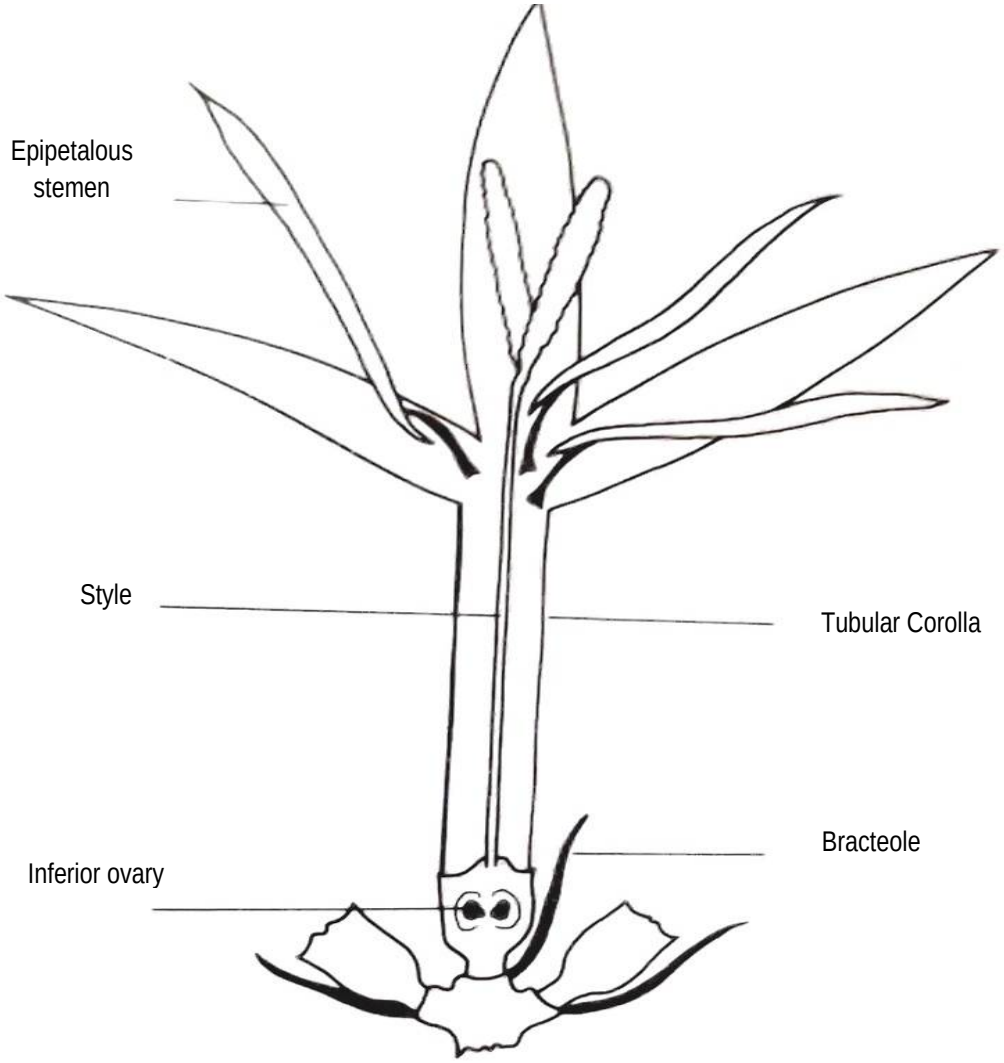


Figure 4.4. A longitudinal section of *Coffea arabica* flower (after Cobley 1976:205).

Figure 4.5. Coffee flowers in blossom, Majangir village in Yäki district.

The size and condition of flowers are fully dependent on the weather. When the weather is not hot and dry, they are very large, but not so copious. Both sets of flowers are few in number, small and imperfectly formed, and the petals frequently become green instead of white (Wellman 1961).

A coffee fruit has two seeds in it. The embryo in them is somewhat curved, wrapped in foliaceaous cotyledons and the albumin is horny when mature and dry. The skin of the fruit may or may not be of resistant tissue. The pulp or exocarp is often juicy although this is not all the time the case in all species and it involves the endocarp or parchment shell. The seed coat is found inside the parchment. In *arabica*, this is the silver skin, but it is not the case in other species (Wellman 1961).

Figure 4.6. Coffee fruits (berries) on plagiotropic (lateral) branches of *Coffea arabica* tree, Gomma.

As seen above (figure 4.6), coffee fruits grow on plagiotropic branches. This part of the coffee tree is, therefore, crucial for fruit production. While farmers in the study area cultivate coffee in fields, they tend to leave a reasonable space between coffee seedlings to allow proper growth of branches of coffee tree and to avoid contact between plagiotropic branches of two coffee trees to minimize the risk of transmission of coffee disease through contamination of parts of the plagiotropic branches. I will discuss this subject in chapter nine while dealing with the cultivation and consumption of coffee.

The description on the physiology of coffee shows that plagiotropic (lateral) branches favor the growth of flower and the production of fruits (berries). The fact that pollination in *Coffee arabica* is mainly autogamous is redolent of the lesser need for pollinators. From an archaeological point of view, the chance of recovering botanical remains from a coffee tree depends largely on the taphonomy and the context in which macro-parts of the plant are deposited. But still, the prospect of recovering pollen of *Coffea arabica* in coffee-growing regions of Ethiopia, as in other flowering plants, is high and such data could perhaps be used in the reconstruction of the vegetation history of the areas in general, and southwest Ethiopia in particular.

CHAPTER 5

THE HISTORY OF COFFEE

> The earliest employment of [coffee and tea] is veiled in as deep a mystery as that which surrounds the chocolate plant…One can only say that…they have all been used from time immemorial and that all three are welcome gifts from a rude state of civilization to the highest which exists today. By the savage and the Aztecs of America, by roving tribes of Arabia, and by the dwellers in the farther East, the virtues of these three plants were recognized long before they were introduced into Europe.
>
> -William Baker, *The Chocolate Plant and Its Products*, 1891
> (Weinberg and Bealer 2002:3)

The three most popular drinks in the world, coffee, tea and cola, are of different taste and smell, but all with caffeine content (Weinberg and Bealer 2002). From historical perspectives, however, the origins and the first use of coffee have shrouded in mystery. Even then, there are divergent views relating the subject. In lieu of presenting a linear history of the plant, this section succinctly reviews existing alternate views on the origins of coffee, the etymology of the word, and offers a précis of its dispersion and consumption. It also concisely presents the history of the crop in the economy of Ethiopia in general and southwest Ethiopia in particular. Presenting an in depth history of coffee, albeit not comprehensive in its approach, is an important subject addressed in the subsequent sections of this chapter.

We have seen that from botanical point of view, the origin of coffee is deemed to be in southwestern Ethiopia. The historical contention on the origin of coffee in Ethiopia is also sustained by results from genetic studies. Although the existence of wild population of *Coffea arabica* has been confirmed from the Boma plateau of southeastern Sudan and Mt.Marsabit of northern Kenya (Charrier and Berthaud 1985; Friis 1979; Smith 1985; Wrigley 1988), the commercial *arabica* cultivars grown worldwide comprise two genetic basis of *Coffea arabica* var.typica (ramer) and *C. arabica* var.bourbon (B.radr.). It is believed that they spread from Yemen (Krug *et al.* 1939 in Anthony *et al.* 2002; Carvalho *et al.* 1969) despite the fact that the cultivar's genetic base is in southwestern Ethiopia -where coffee was first cultivated (Lejune 1958 in Anthony *et al.* 2002). Therefore, the history of coffee production is marked by the successive decrease of

diversity within the two sub-populations of wild coffee introduced from Ethiopia to Yemen. According to different scholars, the first reduction took place when coffee was introduced to Yemen between 1500 and 300 years ago. The evaluation of genetic distance has demonstrated that the cultivars are closer to the sub-spontaneous coffee on the west side of the Great Rift Valley than on the east side (Anthony *et al.* 2002:899). Auxiliary to the vast literature assembled by historians, and the scientific evidence provided through genetic studies on coffee, there are also diverse oral traditions in which truth and imagination are inescapably entwined to explain the origins of the plant. In the forthcoming paragraphs, a popular legend relating the discovery of the plant is described.

Much of the lore of coffee in Ethiopia is still handed down orally. Numerous as they are, oral traditions relating the origin coffee cannot be wholly presented in this dissertation. In this regard, a nationally apocryphal story told in relation to the origin of the plant commonly found in Western literature (for example, Africa Rikai Project [ARP] 2012:3-27; Weinberg and Bealer 2002:3-4) revolves around a mythical goat herder Kaldi and his prancing goat and is said to have taken place in the 6th/7th century (Weinberg and Bealer 2002). The story alluded in these works accords with other legends known in Kafa and Jimma area where some informants have kept the tradition or part of it. The discovery of coffee, according to informants and these sources on the tradition, is attributed to the herder, who found out the stimulating impact of coffee after he found a goat jumping up and down apparently because of the stimulating effect of the red berries from one of the coffee trees in the forest. The story goes on telling that the goat herder saw other goats stimulated by the cherries in the forest and thus tasted those magic berries and felt strength all over his body. For this reason, priests who stayed awake during night prayers (ARP 2012:21-25) later consumed the beans.

Another version of a similar story relates the roasting of coffee by a camel herder. He tried the invigorating impact of coffee beans in his animals, but realized the bitterness of the berries and threw them into the fire. In this way, he found coffee to be delightful and aromatic, and began roasting it (Mercier 1980-82:146 in Pankhurst 1997). Notwithstanding the different myths of origins in Arabia, the stories on the subject in Ethiopia itself are rather diverse and divergent. Missionary Krapf (1860) for instance, notes the essential role of African animals in the early progress of coffee. Unlike the story of Kaldi, this saga recorded by Krapf inexplicably relates the spread of wild coffee seeds from central Africa carried by civet cats to the Ethiopian highlands (Weinberg and Bealer 2002).

The oldest historical documents on Ethiopia and the Horn make no mention of coffee. Concomitant to this, the Periplus of the Eritrean Sea, the oldest written source concerning Ethiopia,[46] produced about 50 AD, was a treatise dedicated to the Egyptian trade relations with East Africa and India. It was written in Greek by an unknown merchant though neither the articles of trade nor the items subject to duty in Alexandria (see Schoff 1912:284-289) refer to the plant. The same is true of the Christian Topography,[47] an account by a Byzantine traveller-Cosmas Indicopleustes[48] from the 6th century AD (McCrindle n.d). Winid presumes that coffee at that time was not a product, which could inspire such an interest in international trade at an earlier date as other lucrative trading items like gold, ivory and spice (Winid 1969:92) - a plausible view that accords with the historiographic context of the period. Given this historical setting, it is possible to set forth that the absence of coffee in these historical documents of convincingly older periods in Ethiopian history does not preclude the likelihood of the exploitation of the plant, the least to say, in the presumed areas of the origin of the plant for which no historical rationalization could be presented here. The ambiguity on the subject could possibly be clarified through archaeological study aimed at recovering evidence on early use of coffee by humans- a subject still pending in Ethiopian archaeology. It should, however, be reminded that the occurrence of two partial coffee beans dated about 1740 bp (Hildebrand *et al*. 2010) from Kumali rock-shelter demonstrates that the archaeological recovery of coffee is not a chimera. The medieval dumps of Somaliland, dated between the 12th to 16th century AD, also bear remains of coffee grains suggesting that the plant was exploited and exported at that time (Curle 1937:324).

5.1. The Etymology of Coffee

The origin of the word coffee is apparently indefinite. Even then, existing sources on the subject suggest a probable etymological connection to three different words. The first is the Arabic term, *kahwa* (*qahwa*), originally meant wine but transferred to denote to the beverage prepared from coffee beans at the end of the 14th century. It is is considered as the basis of most common words for coffee in different languages

[46] There are other older references, but it is not clear whether they refer to what we now know as Ethiopia. Certainly, we know that Roman authors used the term "Aethiopia," in a rather different context, to refer to the broader Sub-Saharan portion of Africa (Mitchell 2005:2).

[47] Cosmos wrote the Christian Topography in 547 AD (McCrindle n.d: x).

[48] In his second book Cosmas mentions of his visit to the port of Adulis and when the Aksumite king was preparing for a military expedition against the Homerites in Arabia during a military expedition in 522 AD (McCrindile n.d: x).

(Houstsma 1987:631). The second word is the Turkish "*khaveh*" - the name of the beverage made of coffee beans. The term is considered as derivative of the Arabic, *qahwah* and is viewed as an indirect root of the names of the beverage in various European languages (Ukers 1922). The third and the last is "Kafa,'' which is the name of the alleged home of coffee in southwest Ethiopia (Houstsma 1987; Ukers 1922).

The first written mention of coffee itself was from Rhazes, a 10th century Arabian physician (Banks *et al.* 2010; Smith 1985; Weinberg and Bealer 2002). Rhazes (AD.850-922 AD) referred to the coffee bean as *bunchum*. In fact, it is generally assumed that the term *bun* is an African word for the coffee plant, which afterwards became the Arabic *bunn*, a word denoting both the plant and the berry. The word coffee, meaning the beverage, is a modified form of the Turkish word *kahveh* which in turn is derived from the Arabic- *qahwa* (see Banks *et al.* 2010; Houstsma 1987; Kaye 1996; Ukers 1922).

It is true that the beverage from coffee is known by its Arabic name and the scientific name, *Coffea arabica*, given by Linnaeus in 1753 was based on its Arabic name as elucidated earlier. Nevertheless, a still widely used term, *buna*, a name for the plant and the beverage was used a century before the introduction of Linnaeus's scientific designation. This comes from the work of Rosen Felix (1907) who based on the early work of botanist Alphonso de Condolle (1884) states that Prosper Alpinus (1553-1617), a professor of botany at Padua University referred to it as *'arbor Bon cum fructu suo Buna'* (Pankhurst 1997). In fact, it is admitted that coffee originated in the highlands of southwest Ethiopia, but partly took its name based on *qahwa* (Houstsma 1987; Pankhurst 1997; Winid 1969). Towards the end of the 14th century, this word was transferred in Yemen to the beverage made from the berry of the coffee tree. The resumption of such a transference of meaning is not accepted by some who consider *qahwa,* at least in the sense of coffee, is a word of African origin and seek to connect it with the alleged home of coffee, Kafa (Houstsma 1987).

Some etymologists have also related the root of the term coffee with Kafa, the alleged birthplace of the plant in southwest Ethiopia (ARP 2012; Houstsma 1987; Chavalier 1947 in Fekadu 2013:192; Ukers 1922). We can get the earliest attempt in establishing etymological link between the word coffee and Kafa in the travel account of Bruce (1790: Vol.2:226) which consequently was frequented in the works of some travellers such as Ceechi and Powel cotton in 1888 and 1902 respectively. The correlation created between coffee and Kafa appears to be dominant in literatures produced for touristic use (Pankhurst 1997). Conversely, there is a general sense of uncertainty over this presumed link between the two (see Kaye

1996; Winid 1969; Ukers 1922). While Ukers indicates that the association is not utterly supported by some scholars, Kaye's work on the etymology of coffee is a direct antithesis to the widely presumed etymological link established by travellers and the pervasive view in support of this correlation by and large admitted amid the Ethiopian society. In the work of Kaye (1996:557-58), one can see not only a high degree of skepticism over the presumed link, but an overt resentment against the association established between Kafa and coffee. Rejecting the putative etymological connection between coffee and Kafa, he further strengthens the idea that the beverage has its root in the Arabic-*qahwa* and perhaps with the enforcement of Turkish *kahveh*. From a rather different perspective, Kaye draws attention to the lexicography of *bun*, which in Arabic stands for both coffee plant and coffee beans. Winid (1969:95) questions that the link between coffee and the province of Kafa is indefinite. In his own words: "whether its source is the name of a southwestern province-Kafa-is unknown.'' We are also told by J. Motyaka that the name of coffee should not be derived from the province of Kafa, as it is often believed, but from the Arabian word *qahwa.* However, due to lack of accurate proofs on the subject, detail elucidation on the origin of this word, for the time being, will settle in the sphere of suppositions (*ibid.*). On the other extreme of the spectrum, Krapf (1860:46) documented a notion with little assent that Kafa took its name from "*Kahava,* or *Kahoa*" -the coffee drink in Arabic -although he accentuated the etymological link between "Kaffa" and the Arabic word "*Yekaffi,*" [49] which literary means "it is enough."

Albeit dubious in nature, therefore, there is linguistic evidence in support of the Ethiopian origin of coffee. The term *bun* and its variants are used to stand for the plant, the berry and the drink (Ambroster 1910:58 in Pankhurst 1997: 518). The use of the term *bunni* appears in texts written in Amharic, Omotic and Arabic referring to the bean, and commonly to the drink in the Sudan. This term, in Arabic, is also used to refer to the brown color of roasted beans (Pankhurst 1997). An alternate view related to the origin of coffee has been set forth by different scholars (Merab 1921; Mercier 1980-82:164 in Pankhurst 1997) who linked the term *bun* (*buno*) with the present Buno-Bedele in Illubabor. However, there is no convention on the etymological link between the word coffee in Ethiopia and place names. The word *bun* itself and its variants are still used amid different communities in Ethiopia. The word *bun* and *buna* are widely used among the

[49] Tradition has it that a religious man, Mahamed Nur ,travelling from the East to West Africa with the purpose of spreading Islam passing through the region that we today call Kafa met Allah, who, in this tradition, is reported to have appeared to him and to have said "it is enough; go no further.'' Accordingly, the land since that time took the name Kafa (for the details of the story, see Krapf 1860:46).

Tigrigna and Amharic-speaking people to refer to the coffee plant, the bean and the drink in northern Ethiopia. The former is also used among the Nuer of western Ethiopia and the Sudan and Tigrigna speaking people in Eritrea. A large section of the Oromo in Ethiopia regularly uses a similar word, *bunä* (*buna*) while the term *qahwa* is used among its Muslim population alongside with *bunna*. This is the case among the Jimma Oromo, who often use *qahwa* to refer to the bean and the drink. In Kafa, *buno* (*bunoo*) is a term used for the plant, the bean and the drink. The Majangir use *mo'eko* (*mo'ekoo*) to refer to the plant, the bean and the drink, though coffee prepared from the beans is still secondary in the coffee consumption habit of the people. Given the array of similar terms used in relation to coffee, the attempt to establish an etymological link between *bun* (*buno*) and a specific place like Buno-Bedele is apparently hypothetical.

5.2. Historical Perspectives on the Cultivation of Coffee in Ethiopia

In this section of the chapter, I recapitulate the cultivation practices of coffee in different parts of Ethiopia based on available historical documents. From the outset, it should be born in mind that sources on the subject are far from providing comprehensive data while those available are mainly produced based on observations of travellers, explorers, missionaries and government diplomats who had been to the different parts of what we, today, call Ethiopia. I have tried to piece together the most important historical data to produce a better picture of the subject under discussion.

To begin with, it is largely believed that coffee was first cultivated by the Arabs in the 14th century (Charrier and Berthaud 1985; Smith 1985; Wrigley 1988). In the first half of the 15th century, all the Near East already knew how to cultivate coffee and its trade value (Winid 1969). The first mention of coffee in local accounts comes from the 16th century, the chronicle of Ahmed Gragn, which reveals that the inhabitants of Dawaro, south of Harar used to pay tribute to him in coffee beans (Pankhurst 1961; 1997) suggesting that the importance of the crop in the socio-political milieu of the period. The dearth of data precludes further explanation on the nature of early coffee cultivation in Ethiopia. Nevertheless, Charles Poncet, a French physician who was in Gondär in 1699, explicates that the crop was cultivated as a curiosity though it was not consumed (Foster 1949; Pankhurst 1961). His observation of the period reflects the overall situation in northern Ethiopia where the consumption of the plant was under a serious interdiction, a subject that will be presented in the subsequent part of the chapter.

Coffee had long grown in southwest Ethiopia (for example, Kafa and Enarya) and Harar and its production in areas further north, such as in Lake Tana, was reported during the 19th century. The presence of the cultivation of this crop in Agäwmidir to the south of Lake Tana and in the southern and eastern coast of the lake was reported in 1809 and 1830s respectively (Pankhurst 1968).

In the 19th and 20th century, the Lake Tana area mainly Zäge in Gojjam, Qorta and Tana Kirkos were the chief centers of coffee production. However, the cultivation of the plant in the Lake Tana environs was undermined by opposition against the consumption of the beverage. Based on the accounts of Pearce and Rupell, Pankhurst further explains that the cultivation of the plant in the area during the early 20th century was principally for trade rather than for consumption (Pankhurst 1968).

Abdussamed (1997:543-546) notes that in the 19th century, coffee cultivation in Zäge depended on slave labor essentially those from Oromo and Sidama country south of the Blue Nile. These slaves were sold at the market of Basso in Gojjam from where the Täwahdo Orthodox Christian priests of Zäge got hold of their labor supply. By the turn of the 20th century, a coffee cultivation system based on slave labor was developed by priests of Zäge. The coffee production in the area reached its peak in the first three and half decades of the 20th century. During this period, the coffee plantations in the area were cultivated by Gumuz slaves. Male slaves were in greater demand than were female. Agäw slave-raiders supplied Gumuz slaves from the Gumuz country on the Sudanese-Ethiopian frontiers to the coffee plantations in Zäge. The Gumuz slaves began to get a hold of higher prices than did the Oromo and Sidama slaves obtained from areas to the south of the Blue Nile. The priests and church musicians (*däbtäras*) began to hold a large number of slaves who cultivated coffee fields and fetched water from Lake Tana. In the process, there were two simultaneous developments: the expansion of coffee plantations at Zäge and export of better quality coffee to Anglo-Egyptian-Sudan via the Mätämma-Gallabat route on one hand, and the soaring prices of slaves on the other (Abdussamed 1997:546).

Coffee was also grown in other places in the Lake Tana-Blue Nile region. Early in the 19th century, Pearce observed that production took place in Agäwmidir, while in the early 20th century coffee cultivation was initiated at Kitar in southern Gojjam after a possible introduction from Wälläga (Cheesman 1936; Pankhurst 1968). Accordingly, coffee cultivated at Kitar was rated as finer quality compared to that of Zäge and this may perhaps have been, in part, attributable to the application of a different method of cultivation by

exposing the coffee trees in plantations where as those in Zäge grew under the canopy of tall trees. Noting on the cultivation practice at Kitar, Cheesman tells us that he was informed by the inhabitants of the area that the coffee seeds were sown in dug beds while the husk is red and soft (Cheesman 1936).The seedlings were transplanted into permanent plantations in July, the first month of the heavy rains, and a second time when they are well grown plants. However, coffee production in the entire region was challenged by the prejudice against the use of the plant due to which its cultivation was mainly for commercial reasons (Pankhurst 1968).

The coffee production at Qorata, though of remarkable size and of excellent quality, greatly suffered from the fighting during the reign of emperor Tewodros, when several coffee trees were destroyed, and due to religious persecution of emperor Yohannes, which caused most of the Muslim cultivators to go into exile. In 1881 Stecker noted that the region was "still famous" for its first rate coffee, which was considered better than that of Zäge and "flourished exceptionally'' (Pankhurst 1968:202-203).

In the early 19th century, coffee was also cultivated in Yäju areas of Wällo, Abi-Adi in Tembien[50] (Tigray) and the Oromo inhabited regions of Shäwa. In the latter years of emperor Menelik, the cultivation of the crop became important in other parts of the country mainly Arsi, Wälayta and Sidamo owing to the introduction of the railway. Nevertheless, it was in 1912 that the establishment of two Belgian companies in Arsi and the beginning of small-scale plantations in Arsi and Lake Ziway area (Pankhurst 1968).

In 1900, the Italians in Eritrea endeavored to develop coffee production by importing coffee plants from Yemen. However, the plan did not succeed for reasons that are hitherto unclear though some authorities point towards the impact of a coffee disease caused by worms, while the Italian official in the area put the blame on the absence of proper management of the project (Pankhurst 1968). The cultivation of the crop portrayed above, though lacks details on many aspects of the production stages, is redolent of the

[50] Small scale coffee cultivation, chiefly for household consumption, has been reported from three different parts of Tigray. These are central zone (Adiha and Tanqua in Abi-Adi environs, Wälägesa and Shimarbe localities of Tembien), southern zone of Tigray (Emba-Alaje area and along the bank of the Aìäla-Teqota river- tributary to Täkkäze River) and southeastern Tigray, mainly in and around the town of Maycäw, in Cärcär and Wäräbaye-where coffee and *khat* (*Catha edulis*) are grown by the Raya Oromo (Hagos Gebrekidan, staff member of Addis Ababa University and Nega Menasbo, PhD student at Addis Ababa University, pers. comm. 25 April 2015).

analogous characteristics of the agronomic practices of modern-day coffee cultivators in southwest Ethiopia- a subject that will be elaborated in chapter nine of this dissertation.

From the very outset, I have indicated that Ethiopia is the origin of *Coffea arabica*. The historical and botanical evidence in favor of this pervasive claim has also been presented in chapter four and the preceding parts of this chapter. In this section, I chart out the circumstances under which the plant spread from Ethiopia to Arabia as portrayed in historical documents dealing with the subject. Notwithstanding the difficulty to aver the process of this development, an attempt has been made to piece together a coherent version of this development in the history of the crop. The subsequent paragraphs, albeit lacking details, provide a picturesque account of the diffusion of the plant.

5.3. Coffee Cultivation in Southwest Ethiopia

From historical perspectives, the kingdom of Kafa and the Oromo Gibe states in southwest Ethiopia were in the forefront of coffee production. Nonetheless, sources on some aspects of the subject are not as detailed as one might anticipate, while redolent of the value of the crop in the economy of the kingdoms that flourished in the area between the end of the 14th century and the 19th century. The importance of this plant in the history and cultures of the region in general, and Kafa and the Oromo Gibe states in particular, cannot be overestimated. In the forthcoming paragraphs of this section, I will make an appraisal of the state of coffee cultivation in Kafa, the Oromo Gibe states, with a stress on Jimma, and its place in the livelihood of the Majangir.

Kafa was a land of coffee, and thus constituted an essential product consumed at home. In the early years of the kingdom, coffee was used for ceremonial and medicinal purposes. The crop gradually became an item of trade (Schmit 2006:6) and along with other goods, chiefly slaves and musk, buttressed economic links far beyond its borders in all directions (Lange 1982:181). Although details of the cultivation methods cannot be provided here, some sources (for example, Schmit 2006; Wrigley 1988) acknowledged that the plant was cultivated in home-gardens and forest-coffee systems.

Based on written accounts from the last quarter of 19th century and the beginning of the 20th century, Lange (1982:8) brings to the fore Neumann's(1902b) idea that Kafa was the chief coffee producer of coffee in the entire Africa with an estimated annual export of 350 tons of coffee beans reported by Cecchi in the 1880s.

The cultivation of the crop supplied subsistence farmers of the Kafa Highlands with a meager cash income since at least the turn of the 19th century (Leon 1907:560 cited in Lange 1982:8). Notwithstanding the negligible commercial value coffee had at the beginning, slaves and merchants played a key role in disseminating the plant from Kafa to other provinces (Wrigley 1988; Schmitt 2006). The cultivation of the crop by peasants of Kafa and its economic importance grew steadily in successive regimes after the incorporation of the kingdom to the Ethiopian empire at the end of the 19th century. Even in the 1970s, coffee cultivation in Kafa was the concern of a large section of the rural population who either rented or worked for landlords, who were able to amass profits from the export of coffee and eventually accumulated wealth (McCann 1995:174). Therefore, coffee was an important source of power for the rulers and chiefs of the kingdom before 1897, and landlords of the imperial period, as it provided the economic foundation of the administrative province.

Compared to the Kafecho and the Oromo, the onset of coffee cultivation among the Majangir is apparently recent. Both oral tradition and the scanty available literature (for example, Stauder 1968; 1971) point to the exploitation of coffee growing wild over many parts of Majangirland. Accordingly, Stauder notes that even in the 1960s the cultivation of coffee among the Majangir was not known since it was incompatible with their pattern of shifting cultivation and shifting settlement. In the environs of Teppi, the Oromo and the Amhara were instrumental in the initiation of growing domesticated strains of coffee. The Majangir, who from the unchronicled past exploited leaves of wild coffee to prepare an infusion from coffee leaves (*kari*), began growing coffee in home-gardens by transplanting seedlings grown wild in the forest and providing the necessary care required to grow the perennial crop. Concurrently, they began to realize and benefit from the economic turnover from the sell of coffee beans while continuing exploiting the leaves to prepare *kari* shared among closer households. In recent years, they have started consuming the beverage prepared from coffee beans though not frequented like *kari*.

Coffee also played a significant role in the socio-cultural and economy of the Oromo Gibe states in southwest Ethiopia. In relation to this, Mohammed (1990:115-117) explains that rich coffee trees took up a sizeable area in the valleys of the Gibe and the Didessa. Gomma was the smallest and the most islamized of the Gibe states, where the plant acquired a greater value as it became central in feasts and rituals, eventually replacing blood as a requisite in religious ceremonies. The cultivation of the crop, among other Gibe states, developed more in the valleys of Limmu-Enarya, although it grew in profusion in such parts of

the region as the lowlands of Gumma, the forests of Gera, and in the valleys of the Didessa and the Gibe. Mohammed further notes that the forests of Gera rivaled with Limmu-Ennarya for the richness of coffee, though the royal coffees amplified the reputation of Limmu-Ennarya. In the course of time, the cultivation of the crop by the people of the two kingdoms was supported by their respective monarchs. Coffee cultivated in the Gibe states, mainly Limmu-Ennarya and Gera, along with that from the kingdom of Kafa was popular in northern Ethiopia for its quality.

Although coffee did not grow naturally in the three of the Gibe states, Jimma, Gomma, and Gumma, their kings made it part of their government policy to stimulate the development of the cultivation of the crop in the states not only by encouraging peasants but also by partaking in the production itself on their own extensive plantations. Evident of these conspicuous changes in the economic transformation was the development in Jimma where coffee production was inexistent in the early 1840s, but flourished gradually and eventually eclipsed Gera by the second half of the nineteenth century. In the same way, Gomma, which lacked coffee in the middle of the 19th century, became a leading producer of the crop in the Gibe region, if not the entire southwest Ethiopia after few decades. Cultivation was intensified in the Gibe region owing to the encouraging role played by the kings because of whom wealthy men and peasants began to plant coffee in the shade of forest trees. Two principal factors, the Oromo religious notion of respect for a green environment and the practice of not cutting big trees, coupled with the presence of thick forests in the region, attributed to a favorable environment for the production of the crop (Mohammed 1990:122-123). Note should, however, be made that the Mao have a different perspective on this: they associate the Oromo with deforestation (González-Ruibal 2014). Indeed, one cannot rule out the fact that Oromo farmers maintain big trees and some groves (as opposed to total deforestation in northern Ethiopia), which permits the growing of coffee.

Coffee, deemed to be indigenous to the thick forests of Jimma and Kafa, grew naturally and profusely in the Gibe region although after the occupation of the areas by Menelik's army, coffee farms were deserted as cultivators focused on the production of subsistence crops for household consumption and compulsory provision of rations for the occupying imperial soldiers (Guluma 2014:100). In due course, the abandoned coffee farms were appropriated by Menelik's soldiers and their chief officers, under the guise of "wild/forest coffee"- an appellation used to refer to once cultivated coffee farms in Kafa and Jimma, but abandoned during a period of social and political turmoil in the region (*ibid*:112). What followed the conquest was rather

a systematic economic exploitation of the region manifested directly through levying taxes in coffee and confiscation of lands and commencement of coffee plantations. A letter addressed to Abba Jifar in 1893 is suggestive of the growing importance of the crop in the international trade. Guluma (2014:100) notes the content of the emperor's letter as follows:

> I have imposed coffee taxation on the governors of the Galla [Oromo] lands; because the *Ferenji* [Europeans] from whom I have purchased firearms asked me to pay them in coffee. I have imposed 500 *dawulas* [50,000 kilograms] of coffee on you. Collect the said amount and send it to me immediately.

In the early 20th century, the appropriation of abandoned farms by the *naftanya* (gun-bearers) in the pretext of ''wild/forest'' coffee resulted in further exploitation of farmers of the conquered regions. Farmers had to provide labor service by harvesting and accumulating ripe cherries in the storehouses of their governors whose agents were instrumental in the commercializing the stored coffee to local and foreign merchants. By the 1920s, the growing economic importance of coffee was well understood by the Abyssinian governors who subsequently expanded the coffee plantations in the conquered regions in addition to those confiscated as "wild/ forest'' coffee. In lieu of reliance on the collection of coffee, therefore, young imperial governors began to own coffee plantations (Guluma 2014). By the end of the 19th century, the cultivation of the plant in the area provided not only the economic basis to the monarchs and farmers in southwest Ethiopia, but also became a driving force in the race to control the region.

5.4. The Dispersal and Consumption of Coffee

5.4.1. The Dispersal of Coffee

To begin with, there is a strong yet unconfirmed view (see Lejune 1958 in Anthony *et al* 2002) that takes back the beginning of coffee exploitation in southwest Ethiopia to 1500 BP. We are also told about the use of coffee bars as a sort of iron ration during Kaleb's expedition[51] to Yemen in 522 AD (Keable n.d). This proposition, in all probability, parallels the alleged period suggested for the exploitation of the crop in southwest Ethiopia.

[51] The expedition by the Aksumite king Kaleb was aimed at suppressing the persecution of early Christians under the ruthless administration of the Himyartic ruler Yusuf Yarush in Yemen (Keable n.d; 126; Wellman 1961).

Wellman (1961:32-33) recapitulates eight phases in the dispersal history of *Coffea arabica* from its birthplace to the rest of the tropical world. Three of these waves of dispersal of the plant deal on how it got out of Ethiopia to Arabia and to the rest of the world. Phase I and Phase II of these waves of dispersal of the plant regard internal (i.e Ethiopian) and external (Persian) agents causative of the spread, as we shall see in the next paragraphs. The third of these waves began during the Second World War when soldiers in Ethiopia became instrumental in sending seeds to other African countries.

Leaving aside the other aspects of this history of dispersal, I accentuate on the divergent views relating the period of coffee's dispersion out of Ethiopia to Arabia Felix (now Yemen). However, it has to be noted that the period of introduction of coffee from Ethiopia to Arabia itself is uncertain. Regardless of this, the different views on the history of the wave of this diffusion out of Ethiopia boil down to two principal categories. The first group of scholars (for instance, Banks *et al.* 2010; Houstsma 1987; Keable n.d; Wellman 1961) comprised of proponents of an early dispersion. Accordingly, Banks *et al.* (2010) point out that the plant found its way from Ethiopia to Arabia sometimes between 575 AD and 850 AD. Their view goes in line with Keable's (n.d) proposition of the use of coffee during Kaleb's military expedition to Yemen. In spite of the proposed period, the way the plant got its way to Arabia is uncertain. There is also no proof to confirm its introduction into Yemen during the Abyssinian conquest of the area. In support of the early diffusion, Wellman (1961:32) declares that coffee seeds from Harar reached Arabia Felix through the agency of the Persians in 575 AD and 890 AD. On the other end of the spectrum, Banks and his colleagues propose the possibility that coffee seeds might have been introduced into the area through the agency of African tribes migrating northwards from Kenya and Ethiopia to the Arabian Peninsula. In due course, the migrants were driven back by spear throwing Persians leaving behind coffee trees growing in the area (Banks *et al*. 2010:12).

Another view maintained by a second group of scholars (for example, Houstsma 1987; Wellman 1961; Winid 1969) emphasize the later introduction of coffee from Ethiopia to Arabia. Admitting the uncertainty on the period of the introduction of coffee cultivation from Ethiopia to Yemen, Winid (1969:92) cites an Arabian account from 1566, which reports that coffee was brought to Arabia in the 15th century by a *Sheikh* named Djamal-ed-Din thereby underscoring the presumed view that the transfer took place between 13th and 16th century. The first cultivation of coffee in the region was ascribed to an Arab named Ali Ben Omar

Al Shadhili at about the same period (Houstsma 1987; Winid 1969). Note should, however, be made here that the introduction of coffee to Arabia is associated with different individuals. Consequently, dealing with each of them becomes necessary though the introduction of the plant prior to the turn of the 14th century is not definite (Houstsma 1987).

At an unknown date, coffee crossed the Red Sea and reached Arabia where brewing the beverage began in the late 15th century. Yemen became a center of production and spread rapidly across the Islamic world in the 16th century becoming a fashionable drink in 17th century Europe (Braudel 1981; Mitchell 2005). Insights into regional movement of this plant in 18th century come from the Sadana Island shipwreck on the Red Sea coast of Egypt. The Sadana finds include substantial remains of coffee with aromatic resin and Chinese porcelain, traded items lost in this part of the long trade networks dating to about 1764 or slightly later, probably en route to the Suez (Ward 2000; 2001; Ward and Baram 2006).

The Dutch were the first to spread coffee over to Central and South America and these territories have now turned into one of the chief continental farms for this cash crop. In 1503, the Dutch introduced the plant to Ceylon (now Sirilanka). By the end of the 17th century, the cultivation of coffee in Ceylon and India was beginning to break Europe's dependency on coffee from Arabian ports. The introduction of the plant to tropical America took place in the 18th century: to Jamaica in 1730, to Cuba in 1748 and to Brazil sometimes between 1725 and 1730 (Wellman 1961). The existing sources on the history of coffee point towards an Ethiopian origin of the crop and its introduction to Arabia, although the period and the course of events resulting in the said introduction are imprecise, and the role of different actors in the course of the dispersal is far from simple.

5.4.2. The History of Coffee Consumption in Ethiopia

Akin to the discovery of coffee and its dispersion to Arabia, the evolution of the consumption of the plant is a subject of historical conjecture. Accordingly, it is presumed that coffee was first used as food long before the beginning of the consumption of the beverage (Banks *et al.* 2010; Weinberg and Bealer 2002; Wellman 1961; Winid 1969). Based on the commentaries of early European explorers and botanists, Banks and his colleagues indicate that the Ethiopians, appreciative of the stimulating effect, chewed raw coffee beans. They also pounded matured coffee cherries, and mixed them with animal fat and molded the resulting paste into pallets producing a vital source of energy fortified with fat and protein plausibly used during tribal

warfare(see Banks *et al.* 2010; Weinberg and Bealer 2002). It also appears that the plant was consumed as food in Arabia, and the preparation of a decoction by mixing coffee with water was a later development. Even by about 1000 AD, the drink was apparently a rather crude decoction made of green-coffee beans and their hulls. It was also possible that the beans were not dried before use prior to the 13th century (Banks *et al.* 2010:13).

Not only historical documents, but also ethnographic data in Ethiopia indicate the consumption of coffee as food and beverage. Three different parts of the plant - the bean, the pulp and the leaves- are consumed in different forms. A beverage tasting poor quality tea prepared by infusing dry coffee leaves and a beverage made of coffee pulp, *hoj*, are common in eastern Ethiopia. The methods of preparing these beverages have been maintained since many years (see Winid 1969:94). Besides, the practice of preparing and consuming butter smeared salt-spiced coffee beans, known as *bunä-qäla,* during certain religious rites is a very old tradition. Coffee in Ethiopia, and primarily in southwestern parts of the country, is a common drink frequented during social gatherings. The stimulating effect of this aromatic bean has made the crop desirable in a way that ordinary staple crops grown by farmers do not satiate. It is also no wonder that the crop is no more deemed as a beverage associated with the Muslims and the Oromo.

Notwithstanding the limited nature of historical data on early coffee consumption of coffee in Ethiopia, there is a range of information drawn from accounts of travellers, missionaries and diplomats who were to the Abyssinian kingdom between the end of the 17th century and the 19th century. In contrast to Arabia and Europe, our knowledge on the early consumption of coffee in Ethiopia is neither direct nor adequate. Regarding this, Pankhurst (1961:210) indicates the meagerness of direct evidence shedding light on the consumption of coffee in 16th century Ethiopia. Nevertheless, it is still assumed that the practice spread among the Muslims particularly of the Eastern highlands owing to the proximity between Harar, Zeyla and Aden. It is, thus, possible that coffee was an important item at Dawaro south of Harar. Even foreign sources that provide details on many aspects of the Ethiopian society barely make mention of the plant. Sadly, we have no reference to coffee in the accounts of Francisco Alvarez, author of the first chronicle of the Portuguese embassy to Ethiopia (see Alvarez's 1540 work in Stanley's 1881 translation). The omission of coffee in the writings of Alvarez could largely be attributed to the fact that neither growing the plant nor consuming the beverage was known in parts of Ethiopia where he was travelling. The same is true of the chronicle of Jesuit missionaries who were to Ethiopia during the first half of the 16th century (Winid 1969). In

the second half of the 17th century, the plant was mysteriously left unstated in the list of indigenous crops (for example *tef* and *ensät*) as well as vegetables of Ethiopia (see Ludolphus 1682:48-51). The veracity of these opinions was corroborated by the French Physician-Charles Poncet - who visited Gondär and northern Ethiopia in the years 1698-1701. His visit to Gondär was made via Sennar in the Sudan, where he observed the drinking of coffee among its residents and noted that "in Aethiopia [Ethiopia] they make no use of it'' (Foster 1949:106). Poncet's statement is redolent of the fact that coffee consumption was not popular among the population in Ethiopia although his remark on coffee drinking at Sennar should not be viewed as a reflection of the entire culture in the Sudan. Even over a century after Poncet, Buchardt (1822:280) witnessed that coffee was not a common drink in the Sudan. It follows that the coffee drinking reported by Poncet at Sennar may perhaps was limited to certain section of the community. However, it is interesting that the Ethiopian coffee pot (*jäbäna*) is replicated on Sudanese coffee pots and even the pot has a Sudanese or Arab origin, thus indicating that coffee consumption spread in those areas before and from there came into Ethiopia.

An explicit mention to the consumption of coffee in Ethiopia comes from a rather late period than one would expect -the accounts of James Bruce, a Scottish traveller, staying in northern Ethiopia between 1768-1773 with the purpose of discovering the source of the Blue Nile (see Bruce 1790 Vol II: 226; Vol III: 13). We are told by Bruce (1790 Vol III: 13) that he saw coffee being served in the resident of the Naid of Arkiko near Massawa on the Red Sea littoral. In the words of Bruce: "In these countries, the greater honor that is shewen[shown] you at first meeting, the more considerable present [presence] is expected. He made a sign to bring coffee directly, as the immediate offering of meat or drink is assurance you life is not in danger."This is typical of the Ottoman custom in which the development of a social sphere began with a cup of coffee (Ervin 2014:33). Bruce's observation of a similar coffee custom in the Red Sea area is attributable to the fact that Massawa was under the sway of the Ottoman Empire. Likewise, his account also provides the first mention of the type of coffee consumed among the Oromo of his time who parched coffee with butter and prepared it in the form of a billiard ball, 3-4 cm in diameter. The balls of coffee paste infused with butter were kept in leather bags and made up a stimulating and energizing food during travels (Bruce 1790 Vol. II. 226).

The reasons as to why coffee was left unnoticed by missionaries and explorers who had been to the royal palaces of Abyssinia pose a fundamental enquiry why the consumption of the plant was not popular like

other food items and drinks served to welcome foreigners. In relation to this, Winid (1969:92) sets forth the idea that coffee was not popular among adherents of Christianity, and thus had no particular significance and application. Instead, *täj* and *tälla* - two popular local drinks- were very much valued and were not proscribed by the Ethiopian church. In fact, one could find the mention of these alcoholic drinks in some of foreign accounts before and during the early parts of the last century. Although these sources make no mention of coffee, they explain the lavish welcome and feasts in the royal courts of Abyssinia in early times and in the houses of chiefs of the villages of the people they came across (see for instance, Cheesman 1936:40-41; Christopher 2011; Jennings and Addison 1905:204; Johnson 1788:72; Johnston 1844 Vol II: 170).

It is generally presupposed that the use of coffee was anathematized by the Ethiopian church along with two other stimulants: tobacco and *khat* (*Catha edulis*), the consumption of which was considered to be of Muslim and pagan custom. Even if the proscription appears to be much older, the earliest foreign reports on the subject come from the 19th century (Merid 1988:20-21). Describing the prohibition of the consumption of coffee during the early part of 1840s, Isenberg and Krapf (1968:190) note that "the priests of Shoa do not allow it [coffee], in opposition to the Mahomedans, who like coffee so much.'' Likewise, Christians despised the consumption of the beverage by the Oromo since coffee was used in rituals, particularly during Sunday prayers in honor of the *oglia* (*ibid*: 237). According to Krapf (1860:67), *Oglia* is a subordinate divinity under the supreme God, *Waaqa.* Informants view it as the spirit of fertility, rain and productivity.

A report of visits by Remedio Prutky to Ethiopia supports the above postulations as he witnessed the consumption of coffee to be typical of the Muslims (See Petracek 1957:358 cited in Merid 1988:24). In addition to the above ideas, the resentment against the consumption of coffee from the church was evident in Shäwa, where the Christian population did not tolerate the use of coffee for "it was consumed by the Gallas [Oromos] and Muslims" (Pankhurst 1968:60). The greater majority of the Oromo population, being adherents of Islam, did not have to refrain from consuming the beverage. According to Nathaniel Pearce, who travelled in Ethiopia in the years 1810-1819, the prohibition against drinking coffee was proclaimed for the followers of Christianity, issued from the fact that at that time coffee was considered a beverage of the Muslims (Winid 1969). Analogous to the trend in Ethiopia, the consumption of coffee was first met with a

strong opposition in Arabia. In 1511, for instance, the chief of the police in Mecca proclaimed *qahwa* as a forbidden drink (Houstsma1987).

Consubstantial with the above views relating the religious restrictions on the consumption of coffee, trespassing this ban in Shäwa was threatened by an excommunication from the church (see Harris 1844 vol II: 422). This is indicative of the fact that the consumption of coffee among the Christian population in Abyssinia was a highly interdicted practice by the church. At about the same period, Krapf, who was also in Shäwa in the early part of 1840s, reported that coffee was drunk among the Wällo Oromo. It was consumed along with *khat* and tobacco during occasions known as *wädaja* (unions of maintaining friendship) attended by chiefs meeting on the morning of Thursdays and Fridays (Krapf 1860:69).

The negative attitudes against the consumption of coffee, however, dwindled during the reign of Tewodros II (1855-1868) giving way to the spread of its consumption in the subsequent decades (Pankhurst 1968:62). Even then, in areas lying in the emperor's dominions there were certain religious restrictions on the consumption of coffee. Thus, the British envoy to the emperor's court-Hormuzd Rasam- describes that the consumption of coffee was avoided alongside with fish by the Qemant[52] people, who were reported as practicing rites and ceremonies unknown to both Christians and Muslims (see Rasam 1869 Vol.I: 209). A century after the reports of Rasam, the Anthropologist Fredrick Gamst reported that coffee was rarely grown by a section of the Qemant living in highlands, chiefly the Kärkär and Cilga areas and the lowlands. During the 1960s but the consumption of the beverage, though sporadic in nature, was held in affection. In the words of Gamst (1970:103), "coffee, which is very expensive and used only for special occasions is well liked and is consumed with salt, or occasionally with honey.'' Nonetheless, even in the early 1960s, the Qemant priests eschewed from the consumption of coffee (see Winid 1969:94).

The years between 1880 and 1886 could be seen, however, as the apogee of the transformation from abhorrence to the familiarization of the consumption of coffee. According to Pankhurst, the change in the trend is attributed to emperor Menelik's acquaintance with the beverage and the role played by Abune Matewos in dismissing the broadly accepted view of the clergy that the beverage was a Muslim drink[53].

[52] The Qemant Agäw, who also call themselves Qemanta, are agricultural communities chiefly inhabiting areas to the north and north east of Gondär (Gamst 1965:12).

[53] Pankhurst (1968:720) notes, "the traditional prejudice against tobacco and coffee were largely abandoned during the reign of Menelik, coffee being a major export crop."

Regardless of these pioneering changes however, coffee consumption in 1896 was less popular since only a small quantity of it was consumed locally. However, the practice was gaining ground and appreciation in Gojjam (Pankhurst 1968:62, 65). Regardless of these changes, Winid (1969:94) tells us that in the last years of the 19th century the Christians of Ethiopia, in general, did not consume coffee. The consumption of coffee is currently popular among all sections of the Ethiopian society apart from the regions of its natural growth.

Despite the fact that coffee grew naturally and was cultivated in southwest Ethiopia, our knowledge on the consumption of the crop in early times remains sketchy and circumstantial. While Kafa is traditionally regarded as the birthplace of coffee, detailed information on the consumption of the crop from an earlier date is lacking. Yet, Lange (1982:8) tells us "…coffee consumption among the people [the Kafecho] was and still is practically an institutionalized social ritual." The consumption of coffee in the ethnographic context will be addressed in chapter ten of the dissertation.

The Majangir, on the other hand, have developed a coffee culture based on the consumption of *kari*-a hot drink made from infusion of coffee leaves spiced by salt and herbs. In recollections (*toni-ba*) of present day Majangir living in the study area*, kari* was a coffee drink used since the time immemorial*.* Still, we for sure know of its consumption and socio-cultural values in the first half of the 20th century from the works Jack Stauder (1968; 1971). The consumption of the drink has continued to date without alteration in terms of its preparation methods and values. The only noticeable change in the coffee consumption of the Majangir today is the beginning of the use of coffee prepared from the beans although it still is secondary compared to *kari.*

Akin to Kafa, the Oromo in the Gibe areas were known for the production of coffee, although the cultivation in the royal estates of the kingdoms in the 19th century should not be viewed to be exclusively for commercial motives: it was copiously consumed in royal palaces known as *mässäras* (*masaraa*). The forms of consumption varied: coffee seeds fired in purified butter and mixed with pure honey constituted an essential beverage consumed in the area. In addition, coffee mixed with chewed *khat*, sweetened by honey, made up an excellent stimulant (Mohammed 1990:122-123).

5.5. Coffee in Commerce

This section concisely presents the economic role of coffee in the kingdom of Kafa and the Oromo Gibe states along with the consolidation of political power resulting from the thriving economy of the region. Since, the dearth of data limits our discussion on this specific region, evaluating the overall conditions of the coffee trade in the northern part of Ethiopia is interesting. This is, partly, because the trade routes linking the study area ultimately branch out to Massawa - an international harbor from where goods were sent to the outside world and got their way to the Abyssinian kingdom. Understanding the source of supply of coffee, the volume of export and the different trade routes through which coffee was exported over the years, therefore, calls for an in depth assessment of foreign sources, although most are written in non-English European languages. The history of the crop in the commerce of the region, presented in the forthcoming parts of this section, is only a microcosm of a broader history.

I begin by reiterating the fact that historical documents on Aksumite times lack mention of coffee, and thus no evidence on its export (McCrindle 1897; Schoff 1912). As we have seen, there is apparently a huge vacuum in the historiography of coffee, which is particularly obvious in the case of its trade for most of the period prior to the 18th century. Even then, Pankhurst (1961:320) makes the assertion that the presence of coffee trade in this period was somewhat meager and indirect. Anchoring on a report of an English agent at Mocha, Pankhurst further states the likelihood that Ethiopian coffee could be purchased at Mocha though it was of poor quality. As we have seen, Bruce's account on his stay in Ethiopia alludes to the consumption of the plant but says nothing about the export of coffee via Massawa. However, he gained information at Gondär on the possibility of coffee export from Enarya (Bruce 1790 Vol. III, IV.) Although the amount cannot be quantified here, Kafa and Enarya were also mentioned as suppliers of good quality coffee and the coffee from the former was apparently taken to Gondär (Pankhurst 1968). Based on the above data, it is possible to surmise that the beginning of the role of coffee in the economy of the region cannot be assessed beyond this, and the lack of historical data on the subject results in a further analytical hurdle.

Even in the 18th and early 19th century, the relative importance of the coffee trade was less known (Merid (1988:19). Yet, the plant was one of the traded items since the first half of the 19th century (See Abir 1968; Darkwah 1975; Merid 1988). In the early 19th century, for example, significant quantities of coffee from

Yemen and Harar were transported from Mocha to the United States (Abir 1968:4). The information alluded to these sources, by itself, is redolent of the route of coffee trade from Harar. We also know of the presence of a strict interdiction on the movement of coffee into Harar. In this regard, Harris (1844 Vol II:423) reports that the Amir of Harar did not allow the importation of coffee from Shäwa and the adjoining Oromo territories to preserve his own economic supremacy over the coffee trade at the ports of Zeyla and Berbera. He also notes that the price paid for coffee in the rich coffee growing regions, notably Enarya and Kafa, was nominal. Still, compared to other exported items in 1840s, the value given to coffee at Massawa was the lowest (Beke 1843).

During the first half of the 19th century, coffee was one of the items in the caravan trade between Ethiopia and Sudan. Based on the works of the period (for example, Kate 1838, Lejan 1863, and Matteucci 1880), Abir explains that caravans organized by Sudanese itinerant merchants (*jalaba*), and Ethiopian merchants (*jabartis*) brought a range of items (for example, gold rings known as Senari, ivory, silk, Maria Theresa Thalers, and other European products)- into Gondär, where the *jalaba* bought coffee and other commodities (wax and musk) and above all, female slaves for the harems of Egypt and the Ottoman Empire (Abir 1968:51).

During the period under discussion, coffee from southwestern and southern Ethiopia was one of the items carried by caravans organized to go to the port of Massawa (Abir 1968:52). Nonetheless, the coffee trade in the region was a concern of the less significant merchants partly owing to the bulky nature of the beans and the difficulty to transport. It was also less profitable due to the low price given to the crop. This was partly because of the interdiction of the Church on the consumption of coffee and this trend continued up until the second half of the 19th century. Nevertheless, the demand for coffee existed among the Muslim population of northern Ethiopia (Ferret and Galiner 1847:126 in Abir 1968:86).

Coffee did not only provide a means of income for the farmers in the major coffee producing areas but also contributed to the rising power and autonomy of the different kingdoms of the period. This proposition is supported by different scholars (for instance, Merid 1988:19; Mohammed 1990; Pankhurst 1968). Accordingly, the trade in coffee not only contributed to the growing political power of the kingdom of Shäwa prior to the mid 19th century (see Merid 1988; Pankhurst 1968), but also comprised an essential constituent of the resources of Menelik's expanding state during the 1880s. In the 19th century, the Anuak[Anyuaa]

who kept commercial contact with the Oromo to the east of their territory along the Sudanese frontier, used coffee as one of the supplies to obtain beads and wire (Pankhurst 1968:450). Coffee, thus, provided a means to consolidate political power and an important resource to obtain other goods of utilitarian value.

On the other hand, our knowledge on the presence of the pre-19th century coffee export from the Gibe region and the profit obtained out of it is handicapped by the absence of records for the period. Based on this, Mohammed Hassen surmises that before the beginning of the 19th century the Muslim traders in the region principally traded in such luxury items as gold, ivory, musk, and slaves (Mohammed 1990). It is, however, clear that in the first half of the 19th century the export of coffee from southwest Ethiopia was limited due to two major factors: propinquity to the main port of Massawa and the problem of quality. Concomitant to this, Abir (1968:86), drawing on the work of Ferret and Galiner (1847:126), states that the Oromo coffee from the region was of "inferior quality" by the standards of Mocha and Harar, and required a great cost of transportation to reach the coast. In spite of this, the profits from coffee became a means of increasing wealth for the Oromo society in the Gibe region. Without a shadow of a doubt, the overall result of this development enabled the Gibe kings to build new wealth for their people (Mohammed 1990:122-123). Contrary to this, export of coffee from Harar was facilitated by the presence of relatively good communications with the markets of the Red Sea and Arabia (Pankhurst 1968:200).

In the early 20th century, coffee exported from Ethiopia was classified into two: (a) The "Harar" coffee comprising coffee from Harar and a small Belgian owned plantation in Arsi, and (b) "Abyssinian" coffee coming mostly from Jimma area and Kafa[54]. Part of this coffee had its source from Illu-Abba Bora, Sidamo, and Wälläga (Guluma 2014). Why this division of the Ethiopian coffee of the period excluded coffee growing in the Lake Tana area is unclear, although I would suggest that its proper category ought to be the "Abyssinian" coffee.

The opening of the inland port of Gambela on the River Baro heralded a new period in the effective commercialization of coffee beginning from 1907. As a result of this development, there were two

[54] We are told by Biber in the early 20th century that Kafa's export of coffee for the period reached the coast after it first reached Addis Ababa and partly to the Sudan through the Gore-Gambela route (Pankhurst 1968).

fundamental changes in the coffee trade in southwest Ethiopia: a swift increase of coffee exports[55] into the Sudan by the river and the involvement of foreign coffee exporting companies predominantly Greek firms with headquarter in the Sudan but branches at Gore, Gambela, Bure and Metu. The opening of this trade route also facilitated the export of coffee from the Gore and Dembidolo areas to the Sudan (Pankhurst 1968).The significance of trade in coffee receives a favorable mention in the work of Robinson(1926:47) who states coffee as a principal item delivered by Oromo and Abyssinians to the *Jaalin* merchants near Gondär. Bahru (1987) adds to the repertoire of our knowledge on the growing importance of coffee imports via Gambela in the early 20th century noting the collection of government royalty on coffee had its own impacts as well.

Coffee's economic importance in southwest Ethiopia increased as export began around 1910 showing a remarkable growth after 1917, a development attributed to the decline in transport costs due to the construction of the Ethio-Djibouti railway[56] (McCann 1995). In the 1920s and 1930s, there was a significant growth in the export of coffee resulting from the lucrative nature of the business in the crop. During this period, the coffee cultivated at Zäge reached Anglo-Egyptian Sudan via the towns of Mätämma and Gallabat (Abdussamed 1997:546). In the 1930s, coffee from the environs of Lake Tana fetched a higher price in the Sudan (Cheesman 1936; Pankhurst 1968).

In the Gibe region, the lucrative business in coffee became a source of inspiration for the expansion of its cultivation. During the 1920s and early 1930s, however, Ras Tafari (emperor Haileselassie as of 1930) was principally interested in controlling the resources of the conquered regions of the south more than ever before. Subsequently, due to his centralization policy, the autonomy of Jimma was threatened. Since the autonomy was an obstacle for direct exploitation of the wealth of Jimma and above all its coffee, the interest to have power over the coffee trade led to an effort to put Jimma under the direct administration of Addis Ababa. It is, therefore, possible to deduce that the cultivation and export of coffee although originally contributed to the riches of Jimma, gradually became a reason to erode the power of the kingdom and

[55] Pankhurst (1968: 200) notes that the export of coffee showed a dramatic rise from a little more than 100,000 kilos in 1908 to 4,024,000 in 1927-28.

[56] Based on railway statistics, Pankhurst (1968:253) points out that the exports of ''Abyssinian coffee'' from southern and western provinces and those of Arsi and Kafa showed a continuous growth beginning from 1910 reaching 9, 260,000 kilos in 1936.

speeded up its annexation in 1932 -a process that accompanied a political crisis in the kingdom. Using its coffee economy for the consolidation of a modern state bureaucracy was the aim of the imperial administration (Guluma 2014:94, 99). As in the past, coffee continues to play a significant role in the socio-cultural and economic milieu of the Oromo of southwest Ethiopia and other coffee growing regions in south and southeastern Ethiopia.

5.6. Summary of the History of Coffee and Its Implications

Major themes in the history of coffee can boil down to three interlaced areas: the history of its origins, the cultivation and consumption of the plant, and its role in the regional and global commerce. Historical accounts that provide first hand information on the early cultivation and consumption of the plant are so rare that the exploitation of the plant prior to the 16th century remains inferential as a whole. Even then, it is presumed that the plant was cultivated in gardens and exploited in forests in the kingdom of Kafa becoming an important item of trade in the second half of the 19th century. The expansion of extensive coffee plantations among the Oromo Gibe states owes much to the initiatives of the monarchs of the region, particularly of Gomma, which eventually became a leading producer of the crop by the middle of the 19th century. Unlike the Kafecho and the Oromo, historical and ethnographic data suggest the recency of the beginning of the cultivation of coffee among the Majangir who still consume an infusion brewed from the leaves. In the 19th and 20th century, the cultivation of the crop in the Lake Tana area, particularly Zäge, is rather astounding mainly because the priests owning the plantations heavily relied on slave labor and the income generated from the export of coffee was used to meet growing demand for slaves in the expanding coffee plantations.

Like the early history of the cultivation of coffee, the consumption of the beverage appears to have been neglected in foreign accounts and this, albeit circumstantial, is due to the absence of the consumption of the beverage in royal courts where travellers were officially hosted with local cuisine. This is attributed to the abhorrence of the consumption of coffee by the priests of the Ethiopian church who anathematized the beverage as a non-Christian custom, and hence a common psychological fear amid the Christian population of the Abyssinian kingdom towards pollution from non-Christian practices. The extant consumption of coffee was probably marginalized in local sources for similar reasons.

The historiography of coffee in Ethiopia also shows a huge vacuum in the commercial role of the crop. Even then, we know coffee's growing economic importance and the directions of trade beginning from the first half of the 19th century. During this period, for example, the bulk of the crop from southwestern and southern Ethiopia got its way to the port of Massawa by caravan merchants. Simultaneously, the ports of Zeyla and Berbera served as an important outlet for coffee exported from Harar. In the first three decades of the 20th century, quality coffee from Zäge was exported to Anglo-Egyptian Sudan via the Mätämma-Gallabat trade route where as the export of coffee from southwest Ethiopia to the Sudan via the inland port of Gambela was realized in 1907. Above all, the opening of the Ethio-Djibouti railway in 1917 was a major factor for the increasing significance the export of coffee in the subsequent two decades.

From historical standpoint, the cultivation and consumption of coffee and its commercialization have far-reaching implications. The sweeping changes in social relations between Muslims and Christians because of its consumption, and the rumbling shifts in its cultivation gave rise to the accumulation of wealth and the rise of power and autonomy in the kingdom of Kafa and the Oromo Gibe states. Coffee's growing economic significance in the regional and global market eventually provided the setting for the birth and expansion of state owned plantations in the major coffee growing regions of Ethiopia in the second half of the 20th century.

CHAPTER 6

THE PHYSICAL ENVIRONMENT OF SOUTHWEST ETHIOPIA

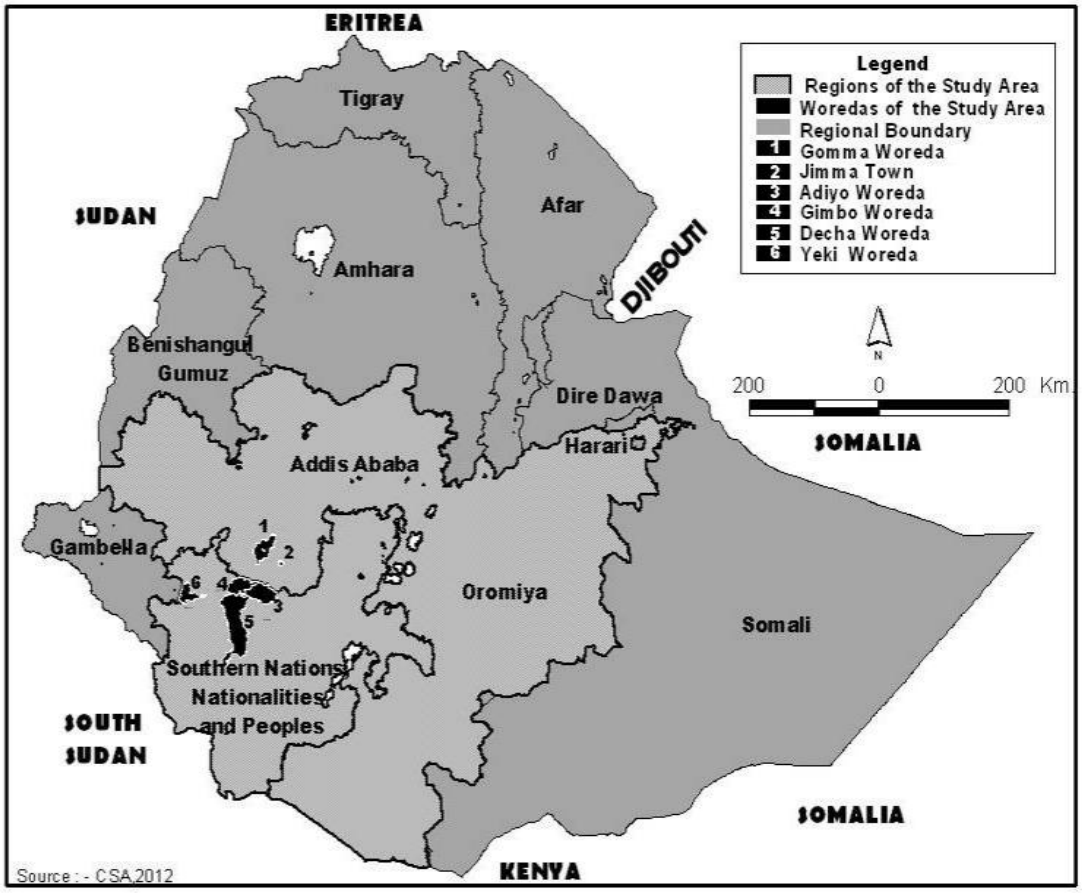
Environment is a crucial dynamic that determines the type of climate, flora, fauna and the economy of inhabitants of an area. It, therefore, shapes the way of life of people that we call culture. In this chapter, I recapitulate the physical environments of southwest Ethiopia in general and the study areas in particular. In this perspective, the focus will be on geographical location and physical landscape, mainly climate, soil, vegetation and drainage in the region.

Located in what is often known as the "Horn of Africa", Ethiopia is situated between 3^0 24' and 14^0.53' North and 32^0 42' and $48^0$12' East (Berhe 1996; Engida 2000; Ethiopian Mapping Agency [EMA] 1988). The country borders Eritrea in the north, Kenya in south, Sudan in the west, and the Republic of Djibouti and Somalia in the east. There is a striking variation in altitude ranging from 100 masl in the Dalol depression to a number of mountains over 4000 meters. The East African Rift system, lately expounded in terms of the continental drift movement, has formed the most important relief regions in Ethiopia. In light of this, the Rift Valley divides the southern half of the country where its floor is occupied by a number of lakes. To the west of the rift system, the plateau plunges gently to the west and is drained by the right bank tributaries of the Nile River system, which have structured deep and remarkable gorges (Last 1981).

The Ethiopian highlands mark a clear geographical division and are generally high in the north where one can get several mountain ranges higher than 3000 meters and lower in the south. The southwestern highlands are, however, different from the northern mountains chiefly due to two different reasons: (a) the mountains are not as high as those found in northern Ethiopia, and (b) the plateaus and the plains are larger and the river valleys are not as deep. This region lies southwest of the northern mountain between the Rift Valley and the lower areas near the Sudan. The highest part of the southwest highlands is found where its eastern mountains overlook the Rift Valley. Mount Gughe (4200 meters) is the highest mountain in southwestern Ethiopia. In Kafa and Wälläga, these highlands are lower with few areas above 2500 meters (Atkins 1970:3).

6.1. Location of the Study Areas

The study areas lie within the southwestern part of Ethiopia and covers Shäka and Kafa, two zones[57] of Southern Nations, Nationalities and People's Region (SNNPR), and Gomma *wäräda* [58](district) of Jimma zone in Oromiya Regional State.



Map 6.1. Location of the study areas.

Southwest Ethiopia, as seen in map 6.1, is shared by three of the nine administrative regions in the country: Gambela, Oromiya and Southern Nations, Nationalities and People's Region (SNNPR). Through this geographical region, Ethiopia shares international boundaries with the Kenya and the newly independent state of South Sudan. In the forthcoming paragraphs, I present a brief outline on the geo-

[57] Zone is an intermediate governance structure between a *wäräda* (district) and regional government.

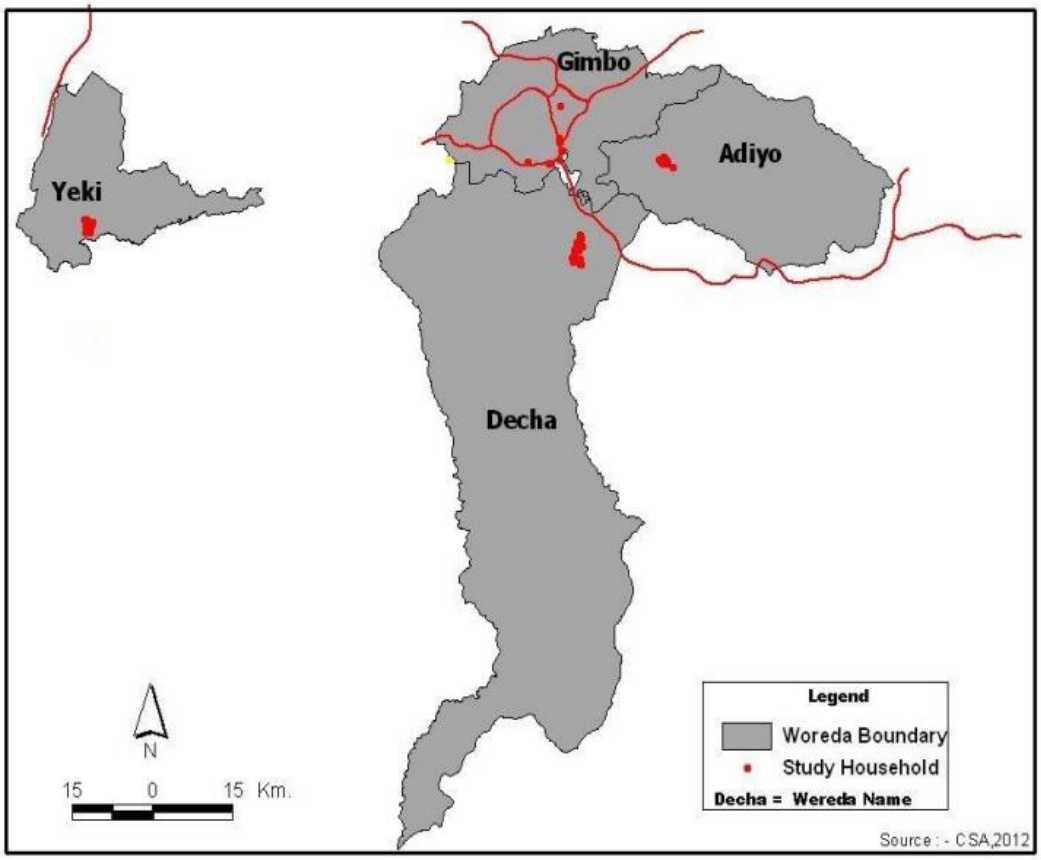
[58] *Wäräda* is the lowest constitutionally recognized governance structure.

demographic context of the three ethnic groups (Kafecho, Majangir and Oromo) living in Kafa, Shäka and Jimma zones of SNPPR and Oromiya respectively.

6.1.1. Kafa and Shäka, SNPPR

The Kafa zone is divided into ten *wäräda*s and one city administration, 296 rural *qäbäles* and 16 town *qäbäles*. It has an area of 10,636.8 sq kms and thus accounts for 7.06% of SNNPR. The zone is inhabited by diverse, but three principal ethnic groups: Kafecho, Cara and Nao (Kafa Zone Finance and Economy Development Directorate [KFEDD] 2013). It is bordered by Oromiya in the north, northeast and northwest; four other zones of SNPPR: Dawro in the east and south east; Omo in the south and Bench-Maji in the southwest and Shäka in the west (see Bekele 2010; KFEDD 2013). The 2007 census result for the region estimates the population of the zone at about 874,716 (CSA 2010a:41).

The Shäka zone, unlike the neighboring Kafa, comprised of only three districts: Masha, Yäki and Andäracha (see CSA 2010a). Yäki is bordered by the district of Andäracha in the north, Bench-Maji zone in the south, Gambela Regional State in the west and the Kafa zone in the east. According to data from the *wäräda* administration, Yäki has a population estimated at 134,519 (CSA 2010a:40) and home to over eighteen ethnic groups (Yäki *Wäräda* Administration Office [YWAO] 2013). The Majangir, apart from Gambela Region, live in different parts of SNPPR of which the district of Yäki in Shäka receives a favorable mention. The Majangir live in dispersed settlements of Yäki, but a large number of them could be found in Addis-Berhan, Fide, Shay and Deppi localities. My study was conducted in three villages (Näwe, Opa and Meda) of Goji, a vicinity some 3-4 km to the east of the town of Teppi.



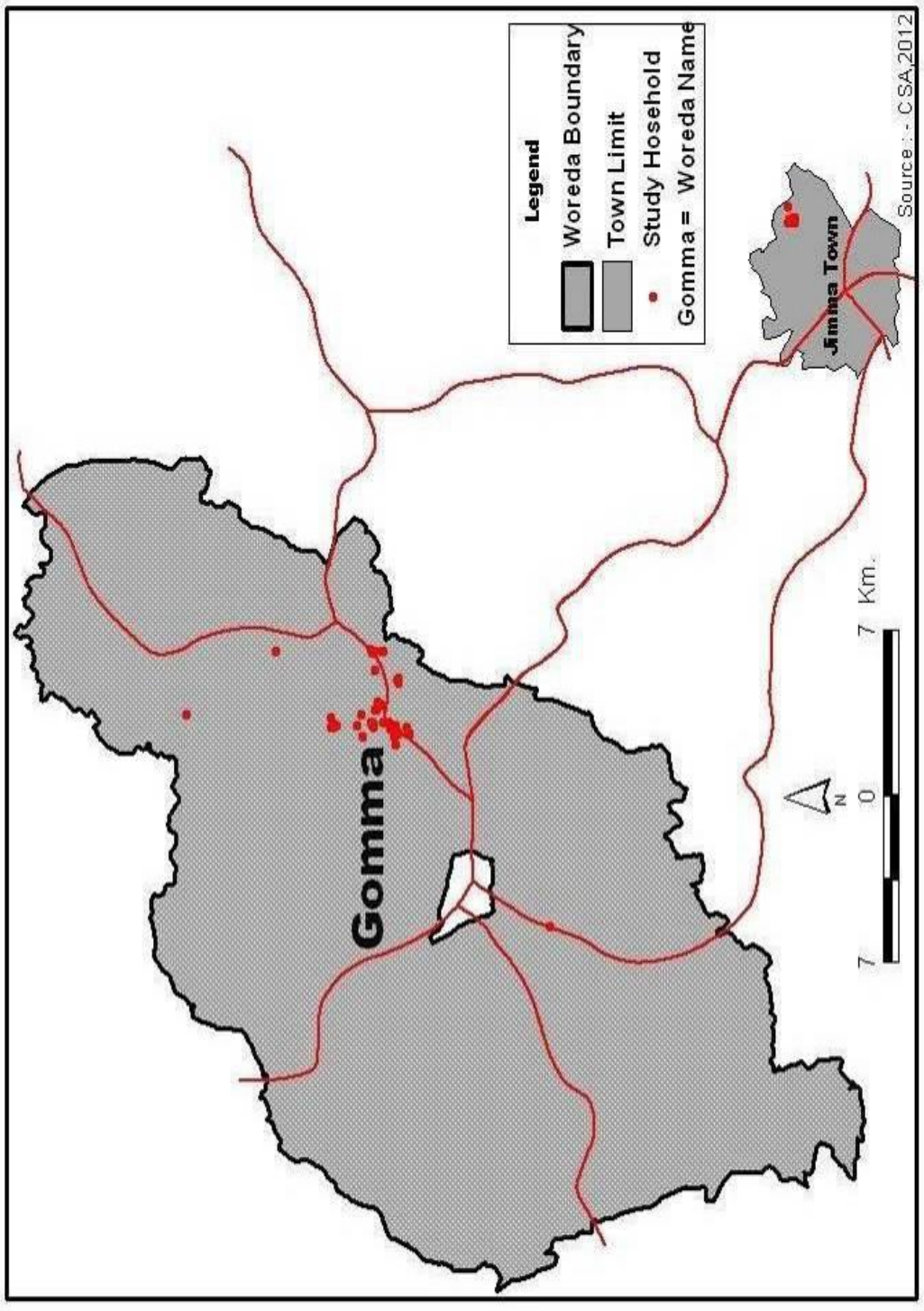
Map 6.2. Study *wärädas* in Kafa and Shäka zones, SNPPR.

6.1.2. Jimma, Oromiya

The Jimma zone of Oromiya Regional State is located between $7^{0}13'$ and $8^{0}56'$ latitude and $35^{0}49'$ and $8^{0}38'$E longitude with an estimated area of 19,506.24 km^2 and the elevation ranges between 1000-3500 masl (Bureau of Planning and Economic Development of Oromiya Regional State [BPEDORS 2000]). The Jimma Zone is divided into 19 *wärädas*. It is bounded by Kafa and Omo zones of SNNPR on the north and east correspondingly, and Illu-Abba-Bora on the west and northwest. The town of Jimma, a memento of its precursor - the kingdom of Jimma- is the commercial and administrative center of the zone. According to the 2007 census (see CSA2010b), the modern town has a population of 2,486,155 with the Oromo, Amhara and Yäma accounting for a greater majority (94.7%) of the entire population.

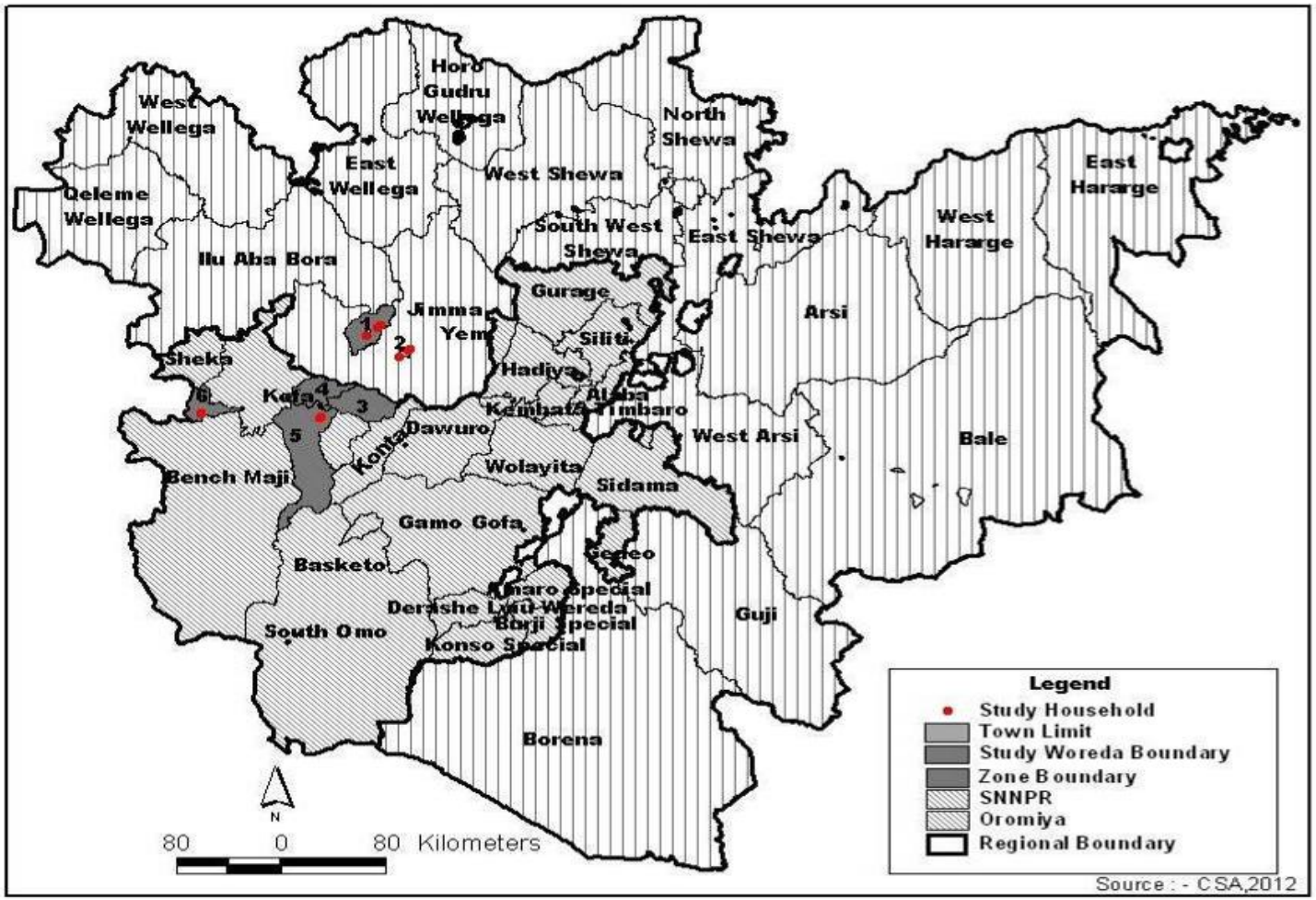
The district of Gomma is found in Jimma zone and has a population estimated at 200,254 people. At Coce-Lämi, a rural *qäbäle* (*gändä/ganda*), where the study was conducted, has 3,147 people. The town of Jimma

was separated from Jimma zone and is currently a special zone on its own (For figures on the population size, refer CSA 2010b: 144, table 9.2, results of the 2007 Census for Oromiya Region).



Map 6.3. Study households in Jimma zone, Oromiya.

Map 6.4. Location of study *wärädas* in Oromiya and SNNPR.



6.2. Geology

6.2.1. Physiography of the Study Areas

Mesfin (1962) notes that the geography of Ethiopia is highly diverse and presents a concise division of its physiographic regions based on geology and relief. Based up on the geological processes, Mesfin (1972) categorizes the physiographic regions of Ethiopia into four: the western highlands and associated lowlands, the southeastern highlands and associated lowlands, the Ethiopian Rift Valley and the Afar Block Mountains. Southwestern Ethiopia falls within the first category which according to Mesfin(1972:37) embraces some of the most densely populated areas as well as the largest coffee and grain producing regions- a statement that accords with present day demographic and economic situation of the region. The southwestern plateau is a highly dissected plateau with many of its parts detached from each other. The physical landscape of the study area is also characterized by disparity in the configuration of the landscape. According to Bekele (2010), undulating lowlands dominate the southern part of Kafa while its northern and central parts are immensely dissected by uneven highlands. There is also a general discrepancy in terms of altitude ranging from areas less than 500 masl in the surging plains of the south such as in Decha *wäräda* (lowest 500 masl near Omo River) and to about 3000 masl in the highlands of Mänjiwo[now called Adiyo] and Tällo *wäräda*s. Mt. Shetra (3348 masl), the highest peak in Kafa, is found in Tällo.

The geology of southwestern Ethiopia is quite diversified. In this regard, the geological processes of the tertiary period and the succeeding geomorphic processes have enormously shaped the relief of the area. This part of Ethiopia is also noted as one of the areas that comprised the earliest territory volcanism in East Africa. The presence over a large area of basalts and associated rhyolites of tertiary origin is evident to the above proposition (Davidson and Rex 1980; Dereje *et al*. 2006; Geological Survey of Ethiopia [GSE] 1988). An explanation can be found in one of the earliest geological studies by Merla and his associates. Their work validates the supposition that the Jimma volcanic match up with most of the effusive in southwest Ethiopia although with minor outcrops east of the Ethiopian Rift. This unit, mostly consisted of massive, white, pinkish and gray rhyolites in thick flows altering with tuffs and subordinate basalts, are considered remarkably thick reaching 1000 m in the Omo Valley. Besides, tuffs containing silicified of Miocene have been known in the area lying between Jimma and Asändabo (See Merla *et al*. 1979). In the later parts of the dissertation, I will discuss how the geology has shaped the fertility of the soil and provided the setting for pottery production.

A study by the Geological Survey of Ethiopia (GSE) in 1980s buttresses the results of the investigations of the preceding decade and provides details on the geologic features of most part of the southwestern Ethiopia. Subsequently, Jimma volcanic consisting of trachyte basalts and rhyolites cover most part of this region. The lower part of this sequence, for its most part, is dominated by basalts and felsic rocks along with basalts overlain by the young, Jimma rhyolite. It should, however, be noted that the Jimma volcanic usually rest on the Precambrian basement, the unconformity being marked by basal residual sandstone. The basalt flows form an unbroken sequence several hundred meters thick in some places. On others, felsic rocks are interbeded with basalt flow close to the base or form a thick succession just over the basal basalts (GSE 1988). In a generalized map on geology and litho-stratigraphic units of this part of Ethiopia produced in 1970s and modified in 2006, one can easily notice that Oligocene basalts and rhyolites cover two of the study areas (i.e. Kafa-Jimma), while Miocene basalts are common in the environs of Teppi in Shäka zone of SNNPR.

6.2.2. Soils of Southwestern Ethiopia

In Ethiopia, soils are fundamentally derived from volcanic lava, Mesozoic marine sediments and crystalline rocks. Anchored on previous research on the types of Ethiopian soils, Mesfin (1972:76) provides an epigrammatic appraisal on geographical distribution on the subject. Consequently, three major types of soils have generally been put forth as covering wide areas of land in the country. These are: (a) a wide range of black soils (sticky and labor intensive mostly left for grazing) dominant in southeastern highlands and northwestern highlands, (b) the reddish brown lateritic soils are, to a certain extent, pervasive on the highlands and are generally loamy in character, and without problem of drainage since could absorb water readily, and (c) The reddish brown soils are easy to work and are the most intensively used soils. They are considered the best soils for coffee.

The southwestern part of Ethiopia is dominated by oxisols, ultisols and vertisols (Huffnagel 1961; Westphal 1974:14, 18). Oxisols fall within the taxa of the most weathered soil developed in areas of high rainfall. The most enabling environment for the formation of oxisols in Ethiopia are the south and southwestern Ethiopia where the rainfall exceeds the potential transpiration during the wettest months of the rainy season. Unlike this, there are variable natural conditions of climate underwhich ultisols can develop. In Ethiopia, the formation of several ultisols has been related with parent materials containing weatherable minerals. The soils have less organic matter because of several factors, but chiefly because of warm climate and

favorable soil drainage, that creates suitable setting for decomposition. Although Pleistocene or older age is assigned to most parent materials where ultisols occur, such soils can occur in late Pleistocene and Holocene sediments. Finally, vertisols, noted for their strong and complex binding properties, are commonly dark in color possibly due to organic matter associated with fine textured clay (see Mesfin 1994:149,205-206,227-228).

The dominating soil unit in the study area is Dystric Nitosol (Nd) (see Woody Biomass Inventory and Strategic Planning Project [WBISPP] 2004). Based on geomorphology and soil study conducted by MoARD (Ministry of Agriculture and Rural Development), Ayele(2011) notes Nitosol, the principal type of soils in the coffee and tea growing regions of southwest Ethiopia such as the study areas, cover about 38%(53,000 km^2).There are, in fact, variations in the spatial distribution of soil within the region. In Jimma zone, for instance, Nitosols are the dominant soil types and it is much utilized for crop production because of their fertility (BPEDORS 2000; Eyasu 2002; Weigel 1986). They are naturally fertile, but large areas in Ethiopia have now been depleted due to incessant cultivation, leaching and erosion (Eyasu 2002;Weigel 1986).The soil map produced by Ethiopian Mapping Agency (EMA) indicates Orthic Acrisols and Dystric Nitosols are common in Kafa while Orthic Acrisols are frequent in Teppi area (see EMA 1986). Acrisols are described be Mesfin (1994:76) as very acidic soils. Although there are noticeable spatial variations within the region, the soils of the study areas in Kafa, Teppi and Jimma favor the cultivation of a wide variety of crops, and trees including *Coffee arabica*.

6.3. Climate and Agro-Ecological Zones

6.3.1. Climate

Even though Ethiopia is located within the tropics, there is a considerable difference in terms of the prevailing climate contained by the traditional ecological zones of the *däga* (the temperate plateau), the *qolla* (hot low lands), and the intermediate frost-free zone of *wäyna-däga*. There is also a noticeable variation in average temperature in the *däga* (22 ^{o}c), *wäyna-däga* (16 ^{o}C) and *qolla* (26 ^{o}C). The main rainy season over most part of Ethiopia occurs during the months of June, July and August at a time when moist equatorial air is drawn from the south and west. This rain is a result of seasonal oscillation of the Inter Tropical Convergence Zone (ITCZ) (see Daniel 1977; Last 1981).

Three crucial factors have been suggested by Fellows (1948:25) as controls of climate in the country: the geographical position, the physical features of the country and those of the nearby areas with respect to dominant weather conditions and bodies of land and water. Of these factors regulating climate, altitude influences temperature and the pattern and distribution of rainfall although local factors are equally significant. Largely, the rainfall in the country is monsoonal although it is distinguished by spatial disproportion in terms of its amount. Typically, highlands in Ethiopia have two seasons: rainy season (April to September) and dry season (October to March).The rainy season is classically divided into two: (a) fluctuating small rains caused by moist air from the Indian Ocean occurring between April and June, and (b) torrential rains occurring between July and September coming from the Atlantic Ocean (Mesfin 1972:12).

Suzuki (1967), who studied the daily precipitation data for stations in Ethiopia for the ten years 1956-1965, distinguishes three rainy and three dry periods in Ethiopia. The results of his study were later extrapolated by Daniel (1977:6-7) to synthesize and interpret the seasonal distribution of rainfall in different parts of the country. Accordingly, the main dry season in Ethiopia is longer in the northern parts and shorter in the south. The "small rains" in spring occur everywhere at about the same time (March to April), the coast gets rainfall mainly in winter, and the southeast gets rainfall principally in spring and autumn. Furthermore, the month of January in southwestern Ethiopia is the driest month although the average rainfall for the month is nearly 40 mm. The average annual rainfall in the region is 2300 mm. Daniel (1977:7) further puts forth fourteen rainfall regimes subdivided into two main groups –Type I and Type II Rainfall regimes. In this dissertation, I will focus only on the type of rainfall in the study areas. Type I of Daniel's assorted regimes are characterized by one rainy season (i.e. the rainy months are found in the western half of the country as well as in the southeastern Highlands), and in this eight rainfall regimes are discerned. Accordingly, the study area, falls within Daniel's regime IA, where there are eight months of rain stretching from March to October, and there are no "small rains." In this regime, the rainfall is well distributed throughout the rainy season.

Anchoring on the general climatic condition of southwestern Ethiopia, we now turn on the stipulating the specific climatic conditions of the study areas, Kafa, Shäka and Jimma zones (For the relative location of the three zones, refer Map 6.1). In Kafa, the average temperature ranges between 12 ^{o}C and 20 ^{o}C. Rainfall prevails for almost all the year between March and September, and the mean minimum rainfall in the area is 100 mm (Tezera 2008). The heaviest rains crop-up in mid June and end of August, while the dry

season starts in September and culminates in April. Kafa's climate is mild in its nature owing to the thick forest cover in the area and the impact of altitude (Bekele 2010:17). The Majangirland in Shäka zone, particularly of the Teppi area, largely shares the climatic conditions of Kafa. About 93% of the zone lies within *däga* and *wäyna-däga* agro-climatic zones and has a well-distributed rainfall (Shäka Zone Government Communication Affairs Directorate [SZGCD] 2012). From a physiographic perspective, Stauder (1968, 1971) notes that the Majangir territory is dominated by a highland that runs to the east and by lowland in the west. It has fertile soil in tropical climate characterized by warm temperatures and abundant humidity. The region gets maximum rain between June and September and falls to a minimum during the dry season between December and February.

The Jimma zone on the whole and the district of Gomma in particular, is one of the areas in southwest Ethiopia that enjoys a well-distributed annual rainfall. Based on 15 years weather data obtained from Gomma *wäräda*, results of study by Improving Productivity and Market Success (IPMS) of Ethiopian Farmers(see IPMS 2007:8) indicates that the average annual rainfall is 1524 mm. The area is characterized by minimal annual rainfall variability. The district receives both small rains (March to April) and torrential rains in the main rainy season (June to October). The study also shows that there are about 7 rainfall months in the *wäräda*. Nevertheless, rainfall is sometimes received even during the other months. Consequently, crop and livestock production is not restrained by the amount and distribution of rainfall as in other parts of the country.

6.3.2. Agro-Ecological Zones

An Agro-Ecological Zone (AEZ) can be explained as a natural region exemplified by a realistically homogeneous climate, physiography, relief, slope, soils, vegetation, animal species that epitomize an area. For that reason, an all-inclusive categorization of the AEZ in Ethiopia, should bind the interrelated physical abiotic and biotic parameters of physiography, vegetation, soils, animal and human activities with climate. Based on the relationship between elevation and temperature, three major climatic zones namely *qolla* (hot-zone), *wäyna-däga* (temperate-zone) and *däga* (cool) are known although there is a clear distinction between their boundary limits (Mengistu *et al.* 1989; Mesfin 1994). This traditional classification system accords with the early classifying endeavors formulated using the relation between vegetation and temperature to identify the three agro-climatic and vegetation zones elucidated by Mesfin(1994): *qolla* or hot zone with average monthly temperature of 20 ^{o}C and below 1800 masl, *wäyna-däga* or temperate zone

with average monthly temperature of 20 ^{o}C during the warmest months and between 1800 m and 2400 m elevation; *däga* or cool zone which is above 2400 m elevation with the upper part being alpine. Presently, a fourth zone that lies above 3800 m elevation designated as *wurc* is recognized.

The three agro-climatic zones in Kafa are *angäsho* (the coldest parts), *gudifo* (milder temperature) and *worefo* (hot zone), which can be equated with the *däga, wäyna-däga and qolla* (see Bekele 2010; KFEDD 2013). The zone has an average annual rainfall varying between 1400 to 2000 mm. The average temperature ranges between 12 and 26 ^{o}C (KFEDD 2013).

Table 6.1. Agro-climatic data of the study areas.

	District/Zone	Altitude(masl)	Mean Annual Temperature(^{O}C)	Mean Annual Rainfall (mm)	References
Kafecho	Decha	<500-2500	15.1- >27.5	1001-2000	(Ayele 2011;BoFED 2007)
	Gimbo	1001-2500	15.1-22.5	1001-2500	
	Adiyo	1001-3500	10.1-25	10001-3500	
Majangir	Shäka zone	900-2750	12-29	1800-2200	Column III and IV. (Million 2011); Column V (Mohammed 2010).
Oromo	Gomma	1387-2870	7-30	800-2000	Column III (IPMS 2007; Techale *et al.*2013); Column IV and V (JZARDO 2008; Techale *et al*. 2007).

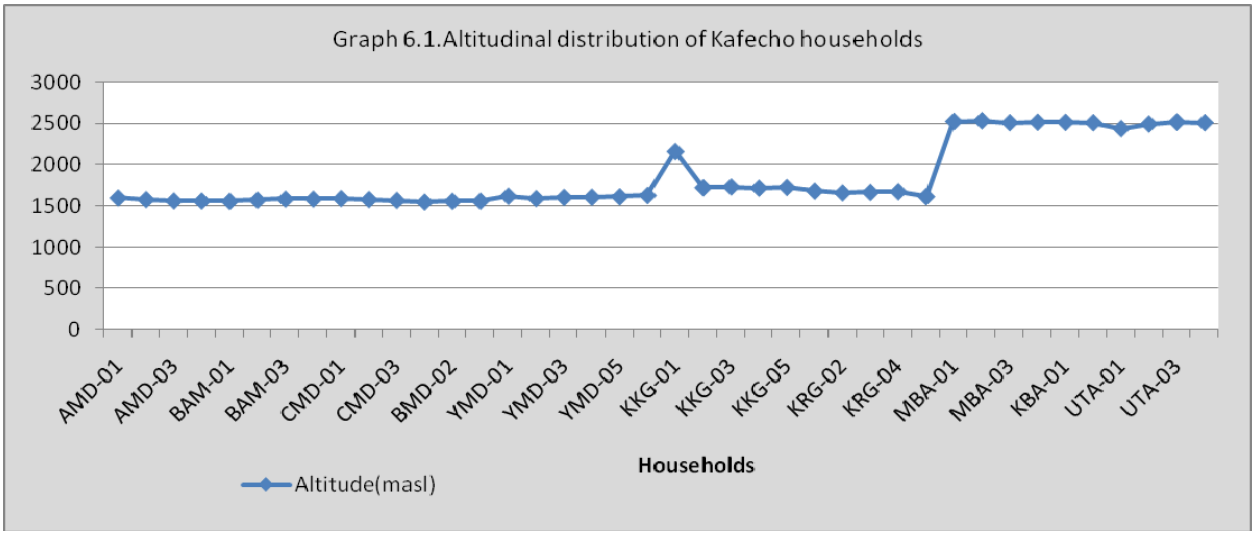
In light of the above categorization and characterization of the agro-climatic zones in Ethiopia, the forthcoming paragraphs introduce the location of the localities studied by the ethnoarchaeological project and point out the implication of their altitudinal location within the context of the topic under discussion. For the purpose of clarity, I first present district level distribution of households studied in relation to coffee production and consumption and related technologies, chiefly pottery. Next, I specify the key to designation of these households to tell them apart whether they fall within the same district or otherwise. Sites are designated after the name of a village, a locality and the district in which they are found or the name of the ethnic group studied correspondingly. The designation indicated below will be used all the way through the dissertation.

Table 6.2. Sampled households in the study areas.

Region	Zone	*Wäräda*	Number of households
SNPPR	Kafa	Decha	20
		Gimbo	10
		Adiyo	10
		Sub-total	40
	Shäka	Yäki	30
		Sub-total	30
Oromiya	Jimma	Gomma	40
		Sub-total	40
		Total	110

Table 6.3. Coding and designation of households in three districts of Kafa.

	Village	Locality/ *Qäbäle*	District	Designation	No. of households and coding
Kafa Zone	Arada-Gicha(Araadaa-Gichaa)	Mankira	Decha	AMD	4(AMD 01 – AMD 04)
	Bahita (Bahtaa)			BAM	4(BAM 01- BAM 04)
	Cäga (Cagaa)			CMD	3(CMD 01-CMD 03)
	Bächа (Bachaa)			BMD	3(BMD 01-BMD 03)
	Yätita (Yatitaa)			YMD	6(YMD 01-YMD 06)
	Kaya-Kelo	Kaya-Kelo	Gimbo	KKG	5(KKG 01-KKG 05)
	Qäja-Araba	Qäja-Araba		KRG	5(KRG 01-KRG 05)
	Boqa	Mätära 01	Adiyo	MBA	4(MBA 01-MBA 04)
		Qäja		KBA	2(KBA 01-KBA 02
		Utära		UTA	4(UTA 01-UTA 04)

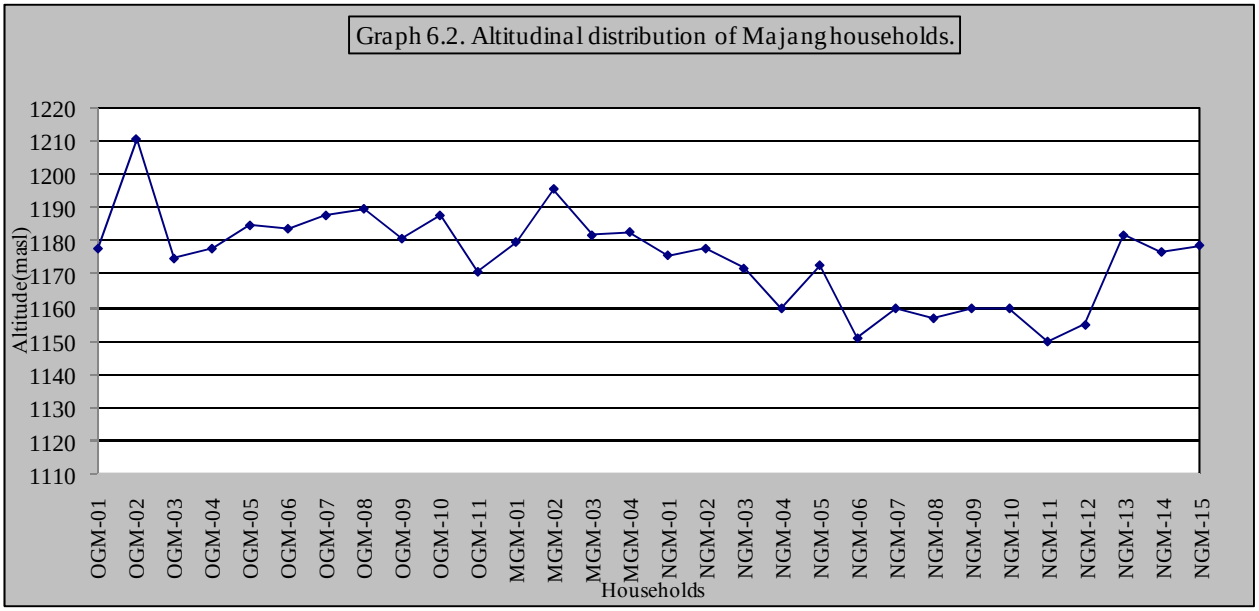


The households inventoried in Kafa zone, chiefly those in the districts of Decha and Gimbo lie between 1554 masl and 1685 masl and thus coincide with the moist *wäyna-däga* agro-ecological zone. As one can see from the graph, ten of the households from Adiyo district lie within the wet *däga* zone. Note should be made, here, that this district is a non-coffee growing part of Kafa noted for the production of cereals, principally wheat. Ten-households were inventoried in this district with the aim of understanding the nature of coffee processing and consumption in an entirely non-coffee growing part of the same cultural setting.

Table 6.4. Coding and designation of Majang households at Goji, Teppi environs.

SNNPR					
Shäka Zone	Village	Locality	District	Designation	No. of households and coding
	Opa(Opaa)	Goji	Yäki	OGM	11(OGM 01 – OGM 11)
	Meda(Meeda)			MGM	4MGM 01- MGM 04)
	Näwe(Nawee)			NGM	15(NGM 01-NGM 15)

In Shäka zone, 93% of the land falls within *däga* and *wäyna-däga* agro-climatic zones and has a well-distributed rainfall (SZGCD 2012:44). Conversely, 70% of the district of Yäki falls in the *qolla* (hot) agro climatic zone while the remaining 30% is evenly shared between the *däga* and *wäyna -däga* zones (YWAO 2013).



Based up on the altitudinal distribution of Majangir households in Goji locality of the Teppi environs, the study area lies between the altitudinal ranges of between 1211 masl and 1150 masl, and hence falls within the *qolla* agro-climatic zone characterized earlier and consequently, exhibits the climatic conditions elucidated for such areas.

Analogous to Kafa and Shäka zones of SNNPR, the Jimma zone exhibits striking differences in ecological setting with a large portion of its territory lying in the highlands (15% highland and 67% of midland), and only 18% of the land is classified as belonging to the lowland areas. Subsequently, it lies in the *wäyna-däga* climatic zone, locally known as *badda-dare*, an agro-ecology deemed to be conducive for agriculture and human habitation (Ministry of Agriculture [MOA] 2007).

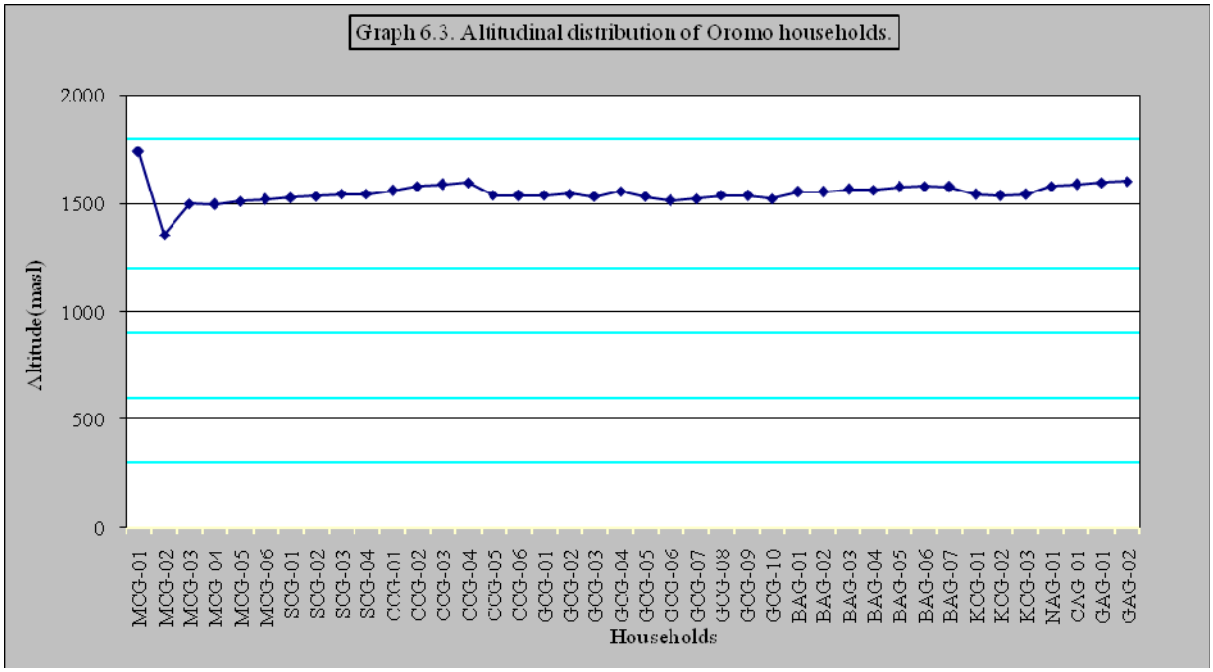
Table 6.5. Coding and designation of Oromo households in Gomma, Jimma zone.

Oromiya					
	Village	Locality/ *qäbäle*	District	Designation	No. of households and coding
Jimma Zone	Mato(maxoo)	Coce- Lämi	Gomma	MCG	6(MCG 01 – MCG 06)
	Simibiro(Simbiroo)			SCG	4(SCG 01- SCG 04)
	Cale-tiqa (Caalee-Xiqaa)			CCG	6(CCG 01-CCG 06)
	Giyo (Giyoo)			GCG	10(GCG 01-GCG 10)
	Bonsile(Bonsilee)			BAG	7(BAG 01-BAG 07)
	Kuso(Kusoo)			KCG	3(KCG 01-KCG 03)
	Nanno- Masgida (Naano-Masgidaa)			NAG	1(NAG 01)
	Cafe-Gäma(Cafee-Gamaa)			CAG	1(CAG 01)
	Cale-Guda(Caalee-Gudaa)			GAG	2(GAG 01-GAG 02)

In Gomma district of Jimma zone, the households lie between 1354 masl and 1738 masl. This altitudinal range fits well into the agro-ecological zones of wet *wäyna-däga*. The climate of the area favors the production of coffee and the cultivation of other cereals.

The altitudinal variation in study areas ranges between 1150 masl in Teppi area and 1738 masl in Coce area of Gomma though the highest altitude(2533 masl) was recorded in Adiyo district of Kafa, a non coffee-growing area studied to understand the coffee consumption practices and the production of coffee related pottery.

The available data, therefore, point towards the presence in the study areas of the three major traditional agro-climatic zones, *däga*, *wäyna-däga* and *qolla.* The characteristic features of these three zones also pertain to the sites indicated above (graphs 1, 2 and 3). Coffee (*Coffea arabica*) grows well in the last two agro-climatic zones as attested in this ethnoarchaeological investigation.



6.4. Drainage and Vegetation

This section of the chapter brings to the fore a glimpse of both the drainage system and vegetation cover of southwest Ethiopia in general, and the study areas in particular. The presentation of data on the subject has manifold, but three chief advantages. These are understanding the ecological niche in which coffee is cultivated, scrutinizing the interplay between coffee cultivation and the environment, and the way farmers exploit some of the resources in their surroundings in due process of coffee cultivation and consumption.

6.4.1. Drainage

The rivers of Ethiopia are frequently modifying the appearance of the country by cutting down the highlands and building up the lowlands. The rate of erosion is high during the heavy summer rains. Many rivers are seasonal. Others, including the major Ethiopian rivers such as the Abay (Blue Nile), Täkkäze, Omo, Shebele, Baro, Awash and other many rivers carry large flow of water all year round. The Abay has many tributaries, including the Bäshilo, Jäma, Muger, Guder, Didesa, Dabus, Belesa, Dinder and Rahad. Some rivers, such as the Omo, have a significant annual variation in the flow of water, which allows for the

agricultural use of the riverbanks on a seasonal basis[59]. Tributaries of the Baro River rise from the highlands of Wälläga, Kafa and Illu-Abba-Bora. Omo is the largest and most significant river and drains large areas in southwestern Ethiopia. Its most important tributaries are the Gojeb and Gibe and all account for the broken character of the southwestern Plateau (Atkins 1970: 7-.10; Mesfin 1972:37-42). Although the Gibe River basin makes up the major hydrologic feature of the region (see Mesfin 1962:22), two other rivers, Abay (the Blue Nile) and its tributaries, and the Omo have greatly shaped the landscape in this part of Ethiopia. The former has eroded the northern and western parts of the southwest highlands, while the latter has cut a large canyon through this region (Atkins 1970).

The southwest highland is among the most dissected parts of Ethiopia owing to heavy rainfall that the area receives. Unlike the southeastern lowlands, the associated lowlands of southwest highlands are discontinuous and are located along the valleys of the major rivers that flow westwards. Since the region slops westward, the major rivers draining this region flow westwards except the Gibe (latter Omo), which flows southwards (Mesfin 1994:11).

Major rivers in Kafa include the Gojeb between Oromiya and Kafa, Gicha River between Gimbo and Decha and the Shurma, rivers which constitute tributaries to the Omo (KFEDD 2013). Apart from these, there are other several small rivers and streams dissecting the study areas. Most of them are tributaries to one of the principal rivers in southwest Ethiopia. The Adiyo River along with its tributaries flows towards the Gojeb while the northern part of Mankira in Decha is drained by Atisho and Egi-aci, two intermittent rivers tributary to the Gumi River. The southern part is drained by Shäkäria, another tributary to the Gumi River. The Näräli River rises from Yänga vicinity in the east and drains the area between its source and five localities of Mankira lying to the west of Yänga: Arada-Gicha, Yätita, Bahita, Cäga and Bächa.

Akin to its neighboring Kafa, the Jimma zone is drained by several intermittent rivers tributary to the Gibe (Omo) to the east and Dedesa River to the north. These include Cäsecha-Kole, Aweto, Urgessa, Fite, Janje and Bore. Besides, the River Gibe is the largest river that crosses Jimma zone and flows towards the

[59] Matsuda's (1996:2) account on riverbank cultivation in southwestern Ethiopia indicates that the Kara, Omotic speaking people living in the village of Dos in the lower Omo Valley live on Riverbank cultivation mainly grain cultivation, small animal husbandry and occasional hunting and fishing. The same is true of the Koegu (Mujugu) living along the Omo who also carry out riverbank agriculture.

Omo and then to Lake Turkana of Kenya (MOA 2007). The district of Gomma is also drained by several streams and rivers tributary to some of the notable rivers of the region. River Didessa, for instance, flows from the highlands of Gomma.

Two rivers, namely Bäqo and Shiy, constitute the major rivers draining the district of Yäki. The Majangir of Goji locality in the district of Yäki live in an area drained by the Bäqo in the east and west of their habitation areas. There is a small scale fishing activity practiced by the Majangir and the inhabitants in the neighborhood of Bäqo although aquatic resources constitute a marginal share in the subsistence economy of the Majangir in Goji area. Fishing is practiced by a few people, and is only occasionally to be sold in the market of Teppi.

6.4.2. Vegetation

The physical conditions essentially altitude, soil, and climate (temperature and rainfall) dictate the type of vegetation prevailing in an area. In Ethiopia, one could discern three main vegetation zones: Temperate Grasslands, Tropical Forest and Deciduous woods and Tropical Grasslands and Deserts (Atkins 1970). The study areas fall within the second vegetation zone in Atkin's taxonomy of vegetation, Tropical Forests and deciduous woods, common in southwestern part of the country. The region is renowned for its dense vegetation cover, especially, tropical rainforests where a canopy of tall trees and thick undergrowth of coffee, palms and ferns are tied up together by creepers and vines. Thickly grown broad-leaved forests are found at lower altitudes and subtropical rainforests to some extent higher up. The forests consisted of such typical trees as *zigba* (*Afrocarpus gracilior*), *käräro* (*Aningeria altissima*), *doqma* (*Syzgium guineese*) and ebony. These regions were previously almost entirely covered by tropical forests though it is much less widespread nowadays. In places where the forests have been removed, there are grasses, scrub, thicket or crops (Mesfin 1962; Atkins 1970: 17- 20).

The presence of high rainfall with lower elevations and higher temperatures has resulted in extensive broad leafed rainforests comprising a range of species entailing coffee (*Coffea arabica*) which grows wild (Atkins 1970; Last 1981). In terms of the type of forest cover, southwest Ethiopia is also a natural abode of what the Ethiopian Forestry Action Program (Ethiopian Forestry Action Program [EFAP] 1994:23-24) refers as "the Natural High Forests, land covered by a close stand of trees with a more or less continuous canopy rising 7 to 30 m, and a sparse ground cover of few grasses." Accordingly, the forest accommodates broad-

leaved forests such as *Aningeria adolfi-frederici* (up to 40m high) and bamboo (*Arundinaria alpina*) (Daniel 1966; EFAP 1994; Mesfin 1962). The broad-leaved rain forest in southwest Ethiopian plateau is quite dense and embraces a variety of tree species with more scattered trees forming the top canopy while the bottom layer consisted of very dense undergrowth shrubs (Mesfin 1962: 68).

The people of southwest Ethiopia exploit forest resources for an array of reasons. The Kafecho, the Majangir and the Oromo of Jimma make use of forest resources in rather different ways. Among these communities, trees are used for construction, making beehives, producing household utensils and agricultural implements and cooking. Unlike the other, the Majangir and the Oromo use the forest in similar ways; at least the majority of the Majangir use it in a more intense way for hunting and gathering wild plants. In addition, they are shifting cultivators who fell the forest every few years and then leave the fields to fallow so that the forest can recover. Bamboo (*Shinaato*), albeit copiously found in the highlands of Kafa, is particularly common in one of my study areas, the district of Adiyo. It is employed to produce such domestic articles as coffee-cups known as *tinjano* or *dollo* (*dolloo*), beer cups and water containers as well as well as to make house covers, doors and beehive covers. Other uses of this plant of multifarious purpose entails constructing walls, ceilings, covers and fences, doors and windows. According to Bekele (2010), bamboo was also used to make cages of civet cats while its soft part is cooked and eaten in the coldest parts. Elderly people prefer using materials made of bamboo trees due to the capacity to cool hot beverages and are easily available and durable than manufactured commodities. Indeed, forests do not only provide raw materials required to produce a variety of utensils for household consumption, but also serve as canopy for coffee shrubs grown under them.

There is a certain degree of difference in terms of biotopes of the lowland forests and the highland forests. Highland forest of the region, particularly Kafa include *wanza*[60] (*Cordia africana*), *bisanna*[61](*Croton macrostachys*)[62], best for spear shafts and walking sticks, *yina/doqma,* common wood to make handle for ax and hoes, and other medicinal plants, condiments and cosmetics. The forest is home to baboon, monkey (*gureza)*, warthog, wild bear, antelope, pig and buffalo (Orent 1969). The Majangir identify over fifty

[60] The Kafecho use the term *diyoo* to refer to the same tree.

[61] *Waagoo* is a cognate term for the Amharic *bisana.*

[62] For the scientific names, see Fichtl and Admasu (1994:247,272).

species of trees, bushes and grasses. In the past buffalo, elephants and leopard were common (Stauder 1971:15, 22) although their number has dwindled over the years.

Another realm of variation has to do with the types of crops grown and the methods of cultivation involved among the Kafecho and the Oromo living in the highlands and the Majangir of the lowlands. The different types of crops grown in each area are presented in the next chapter although it is essential here to note the major agronomic features of the highlands and the lowlands. The cool highlands favour the raring of cattle and the cultivation of *tef*, barley, and wheat and bee-keeping, while such traditional crops as maize, millet and sorghum grow best in the lowlands. As described by Stauder (1968; 1971), the Majangir still produce crops chiefly, maize (*makäle/maakale*) and sorghum (*mashile*/*maashilee*) using a system of shifting cultivation (swidden-cycle) characterized by slash-and-burn. They annually clear forested land, leaving patches of forest consisting hard wood trees that would require great amount of labour in cutting down, to prepare new agricultural fields(*gedi/geedii*). Accordingly, the Majangir prefer to clear fields adjacent to old agricultural fields (*bori*/*borii*) which allows maintaining spatial continuity. Since this method of cultivation passes through stages of agricultural use, abandonment and fallow, it allows regeneration of the forest. Unlike this, the cultivation of crops in highland parts of Kafa and Gomma mainly relies on ox-driven plough agriculture. Expansion of agricultural fields might involve clearing bushes and felling trees in forests far from previously cultivated fields. The method is labour intensive and has an impact on the forest since slash and burn during expansion of agricultural land involves felling trees and new fields are not abandoned periodically to allow regeneration of the forest.

CHAPTER 7

THE SOCIO-CULTURAL AND HISTORICAL SETTING (KAFECHO, MAJANGIR AND OROMO)

In this chapter, an appraisal of the socio-cultural and historical setting of the Kafecho, the Majangir and the Oromo of Jimma has been made from historical and ethnographic perspectives. Sources pertaining to the subject come from historical records, anthropological and ethnographic fieldwork among the three ethnic groups under consideration. In all the three cases, agriculture plays an important role as a basis of subsistence, and above all the cultivation of coffee (*Coffea arabica*) and its consumption constitute a central place in the socio-cultural history and the economy of the people from historical time to date. The concern of the forthcoming sections of this chapter, however, is limited to the presentation of the socio-cultural setting and pointing out the role particularly coffee in the past and present in lieu of an in depth elaboration of the latter. Coffee's socio-cultural role and in particular its ritual significance in ethnographic context is the concern of part III of the dissertation, the core of the ethnoarchaeological research.

7.1. Kafa

The kingdom of Kafa covered the territory that lies one half degree to the north and degree to the south of the 7th parallel and between 35^{o} and 37^{o} longitudes. The Gojeb River, a major tributary to the Omo River, was the northern limit of Kafa. Its southern boundaries were close to the southwesterly bend of the Omo River. The kingdoms of Kullo-Konta and Cara lay between Kafa and Omo River. To the west and southwest Kafa is bordered by the Majangir, Gimira and Maji people (Orent 1969; 1970a). Currently, the Kafa zone of Southern Nations, Nationalities and People's Region (SNNPR) falls within the rainforest region. In Bonga and its adjacent areas, the forest is fragmented due to forest clearance imposed by the need for firewood, demand for agricultural land and expansion of settlements in both urban and rural areas (Tesfaye 2007).

The majority of the population in the zone belongs to the Kafecho who speak Kafinono, which is part of the Gonga-Gimojan branch of Northern Omotic[63] languages in their own parlance (See Bender 2000; Fleming 1976a; Ruhlen 1987).

7.1.1. Socio-Cultural Perspectives

In this section, the nature of kinship ties, division of labor and principal forms of communal works among the Kafecho community along with the nature of settlement, crafts and other components of the culture of the people will be presented.

Kinship Relations

Kinship ties are central among the Kafecho society. All individuals in Kafa have a range of kinfolk consisting of "fictive" as well as real kinship ties. The notion of *yäro* (*yaroo*) or *tämo* (*tamoo*), which refers to clan identification, pervades the field of human relations. The family units embrace *koce-asho*, one man's house literary referred as ''same-*ensät*-person(s).''One man's family might indeed comprise two to three houses-one for each wife. Generally, the wives live anywhere from ten minutes to half an hour apart. Occasionally, a man may have his second wife as much as an hour away (Orent 1969:139). In early times, parents of the male had the responsibility of setting marriages. A final decision was made after studying the behavior of the girl, her competence in preparing food and principally, coffee. Upon the execution of marriage, it is customary that the bride takes the name of her clan. For example, a girl from Dugo clan is called Dugäche (Dugachee) after marriage- a custom still practiced in rural parts of Kafa (Bekele 2010). Akin to the Majangir and the Oromo, the Kafecho identify clan membership through patrilineal descent. As in other cases, exogamy is the subscribed marriage in Kafa although marriage with the three subaltern clans, Mänjo, Manno and Mäniyo, is not socially accepted. Like the other cases and most societies in Africa, virilocality or a patrilocal residence characterizes the social system for married couples in Kafa. Polygamy was also practiced in Kafa essentially because it was seen as an indication of wealth, power of individuals, a means to increase the number of people lost due to either natural or human reasons, and children could inherit their wealth (Orent 1969). In the post 1974 period, polygamy dwindled although the practice has

[63] Bender (2000) lists the north Omotic languages comprising Kefoid (Boro, Anfilo, Kafa and Shäkkächo) to be constituted under the Gonga-Gimojan language.

persisted to date in rural parts where not few people have continued to marry two or more wives and this can even go as high as eight to ten or even more in the case of ritual experts, *alamo* (*alaamo).*

Households and 'Villages'

The Kafecho construct huts with thatched roof and mud plastered walls. Huts are normally set in the middle of rectangular plot of land under cultivation, often within a fence entered through a gate known as *gumbi-kello* (*gumbii-kelloo*). The whole plot is enclosed by a hedge. The types and variation in terms of the shapes of residential huts among the Kafecho in the study area is presented in the figures below. Concomitant to this, Huntingford (1955:128) puts forth five major types of houses known in Kafa, *keʈo(kexoo),* a small circular hut, *kotemo* (*koteemoo*), a large circular house, *šakero*(*shaakeroo*), a long house, *šakero-qato*(*shaakeroo-qaato*), half *šakero* and *herabo* (*heraabo*), a reception house.

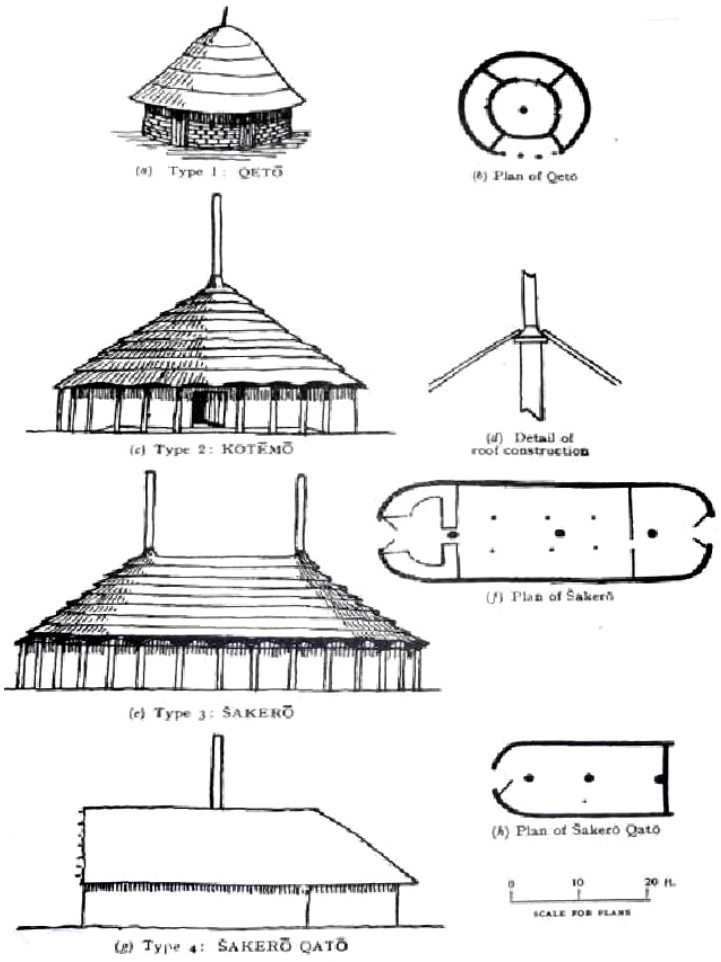


Figure 7.1. Types of houses in Kafa (Huntingford 1955:129).

Figure 7.2. A hut under construction.

Figure 7.3. A partial view of Kafecho homestead.

A living room in rural Kafa may have *afo* (*afoo*), a wooden bed constructed just under the thatched roof, for storing maize to be used for seeds and other materials of domestic significance. In some cases, a sleeping area could be found below these structures. One can notice two fireplaces with hearths in a given household. The first is usually set on either side of the front section of a hut where people dine sitting by the fireplace where as the second is often found in the interior section close by the wall or below an *afo* in case the structure is found in a separate room consisting a separate place for storage. This room is reserved for cereals and utensils used for cooking mainly such earthenwares as griddle, coffee pots, pots for storage and containers. The main cooking area is found in the second section separated from the part for familial activities (eating, drinking coffee, and social gatherings etc.).

Figure 7.4. *Afo,* a wooden-bed constructed below the roof for storage.

A c compound often consists of a living hut for people with a separate section for domestic animals, which could sometimes be separated from a living hut. *Tigo* (*tiigoo*), a shelter with wooden posts covered with thatched roof, is used to store straw of harvests, grass, firewood and agricultural implements. A typical Kafecho compound also has a *goto* (*gotoo*), granary used to store cereals mainly maize. It is commonly constructed from reeds of bamboo by placing the circular structure over wooden logs or lumber. Unlike the Majangir, who make ample use of their compounds for various activities during the dry season of the year, the Kafecho perform most of the household chores inside a house. However, in such cases as grounding and sorting cereals and drying of coffee cherries, processing *ensät* the use of space within the compound remains obligatory.

Figure 7.5. A store house (*digo*).

Figure 7.6. A granary.

The construction of Kafa house and the spatial divisions within the household are highly symbolic of the male-female dichotomy. Women are not permitted to be in an area where the lineage members gather together to build a house for a future groom. It is the groom who must dig the central hole in which the main post of the house called the *gimbo* (*gimboo*) is inserted. Before its insertion, however, a small *ensäte* leaf is wrapped around a ball of honey and wax. It is the responsibility of the groom to place in the hole. This is done to bear out that the couple who will live in this house will be fertile. Although some time may pass by between the placing of the *gimbo* in the ground and the real wedding feast, there is essentially a persistent endeavor at spotting off the role of man and woman with the commencement of action lying exclusively in the hands of the man (Orent 1969:143). Concomitant to this, González-Ruibal (2014:153) notes that the Gonga people traditionally thought that god lives in the central pillar of the house, and thus make offerings there of salt and pray to their god for intervention in the healing of a sick person. This is still practiced by Christian Boro, who also place a large pot (*k'unda)* next to the pole during prayers accompanied by beer drinking. In Kafa, the association between the incense-burner, *coro* - the pouring of coffee and the central pillar is well pronounced particularly in the houses of ritual experts (*alamo*s) and people who traditionally perform *dejo* (*qoce-taqo/qocee-taaqoo),* rituals in offerings to praise the god of a house that safeguards members of a family.

In Kafa, there are no villages in our sense of the term. The term *gäfo* (*gafoo*) refers to a series of dispersed unit of homesteads, i.e. a hamlet (Orent 1969:245). Such dispersed units of homesteads have been referred as a "vicinage" by Turner (1957:34). Every *gäfo* is composed of a series of dispersed homesteads. *Gäfo* solidarity can be seen at times of funeral when each clan in the *gäfo* sends its members as a unit to pronounce the words of mourning (Orent 1969). *Gäfo* or village is also a place where people of the same kinship live together. Most people living in *gäfo* have blood ties and are of the same *gumbo* (*gumboo*), tribe. Individuals in each *gäfo* build their own houses, granaries and posses gardens and farming plots. Most people living in the community keep their cattle at homes to protect them from biting insects and the cold. During holidays, it is a tradition to invite neighbors and relatives for food and drink. These gatherings create close attachments and amusement among the people. Drinking coffee (*buno*) accompanies all forms of invitations and if an invitation lacks coffee, it is said to be incomplete.

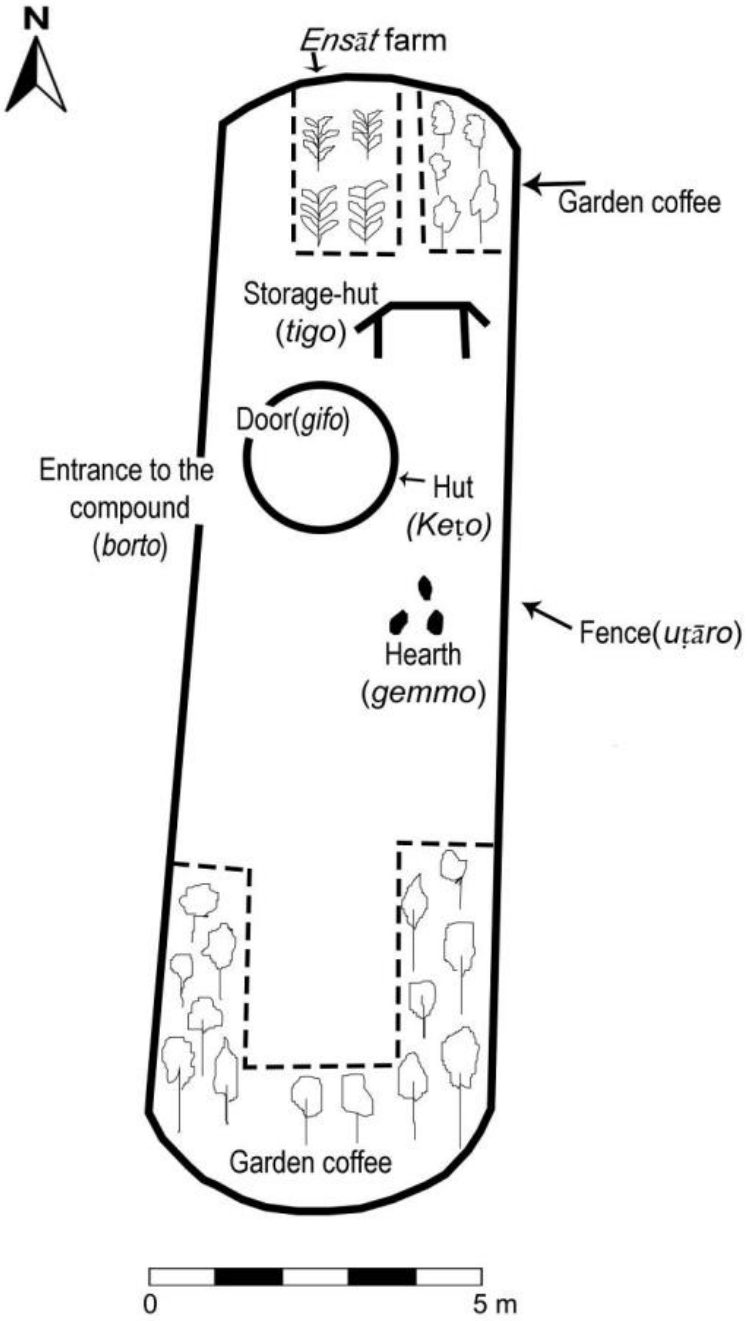


Figure 7.7a. Plan of an elongated compound with a circular hut (*keto)*

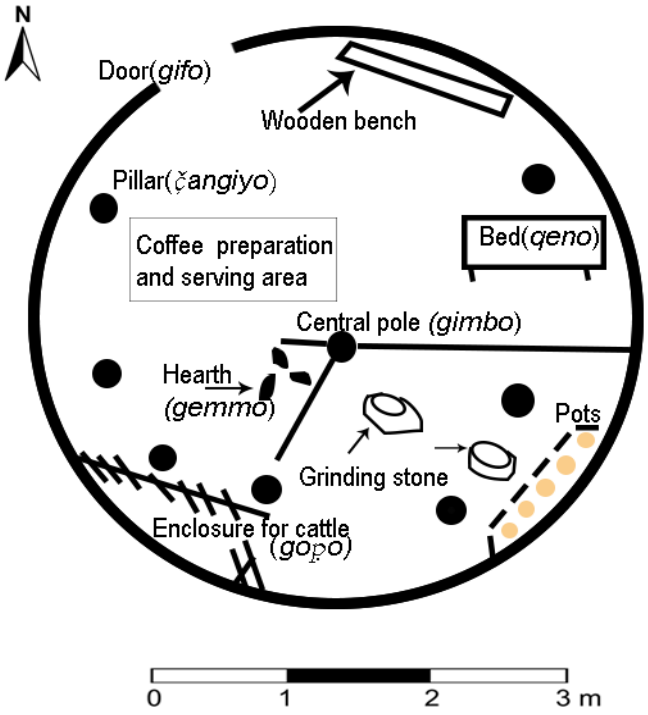


Figure 7.7b. Plan of a circular hut (*keto*).

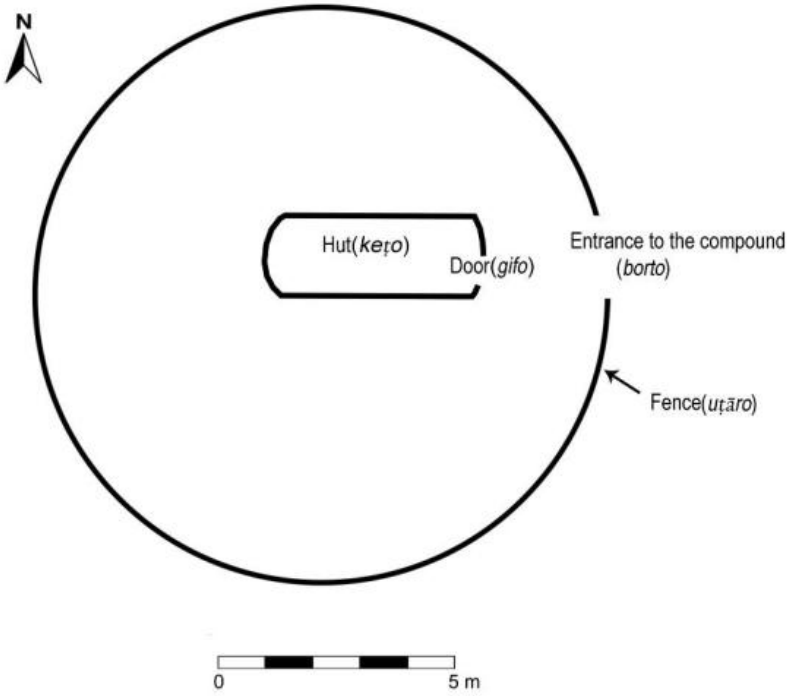


Figure 7.7c. Plan of a circular compound with an elongated hut (*keto*).

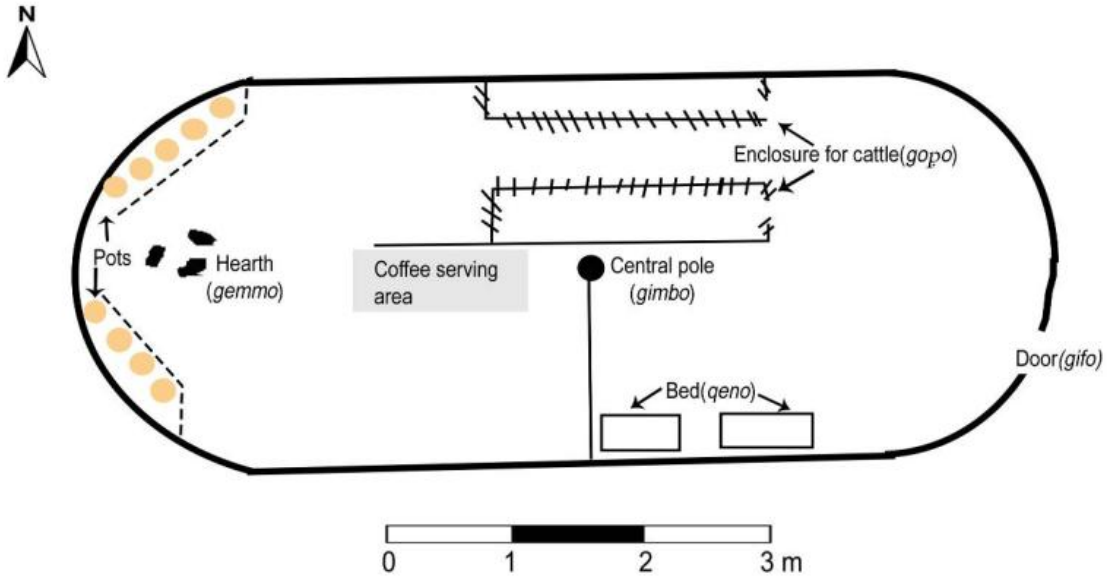


Figure 7.7d. Plan of an elongated Kafecho hut (*keto*).

As one can see from the plans of the houses above, there are long houses and round houses which belong to different socio-economic classes. Poor people often build long houses from wood and such houses often comprise *gopo (gophoo*), wooden enclosure/s for cattle whereas rich people mostly live in round houses constructed from bamboo and wood.

Division of Labor and Communal Works

Kafa is no exception to the almost general division between the sexes in terms of labor and other daily activities. The Kafecho use the term *däfo* (*dafoo*) to refer to a collective work performed by at least ten people living in a given area. This is done turn by turn based on notification from people partaking in the work. There is also a sub *däfo* called *dado* (*daadoo*)[64] in which less than ten people participate (two to nine people). In both cases, group members go to work in the morning hours. There is also a conspicuous difference when it comes to the roles played by men and women during *däfo* and *dado*. Men sow and harvest whereas women do their work in-group with their own women friends.

[64] My informants in the study area, mainly in Mankira locality of the district of Decha, often use the terms *dado* and *däfo* interchangeably.

Most of the activities related to the preparation of land before sowing cereals and harvesting crops and collecting coffee cherries involve a certain degree of communal works depending on the amount of cultivated land and yield obtained during harvesting seasons. Women prepare coffee either at home or in the field and serve members of *dado* ploughing an agricultural land or harvesting yields.

Burial Custom

As regards the process and nature of burial, Bulatovich (1971:15) notes that the Kafecho interred the deceased in cavernous graves at the base of which they dug a cave-like hole. They often bundled up the corpse with a palm leaves carpet, a tanned skin and clothes and put coffee, money, and ivory, etc. along with the dead in the grave. According to Bekele (2010), the cemeteries of the kingdom period were known as *masho* (*mashoo*). There were, indeed, separate cemeteries for kings and spirit leaders, the *alamo*s. Consequently, while the cemeteries of the kings of the Minjo dynasty as of the end of the 14th century were at Shosha and Shada in Tällo district, those of the *alamo*s were in their respective localities.

Marginal Groups and Crafts

In this section, an attempt is made to describe different marginalized groups and crafts particularly marginalized communities covered by this ethnoarchaeological investigation: the Mänjo, Manno and Mäniyo focusing on their practices and their current social position. Wood working results in the production of circular boxes, combs, headrests, beds, mortars, ploughs, hoes, tool handles etc. Women make pillows, clothing, mats, baskets and bags from *ensät*, palm and other fibers. Twisted cord is made from *ensät*-fiber. Cotton is spun by women with a wooden spindle. Weaving is done by men known as *shämano* (*shamaano*). A few members of the Mänjo clan also practice weaving. The leather workers, the Manno, form a submerged class. They prepare skins and make a variety of leather objects, which include masks for ritual purposes, sleeping skins, shields, and saddles. Pottery is made by Manno women, Manneche. The word for potter is *qäjäóe* (*qajachee*) (ethnographic fieldwork and Huntingford 1955). Pottery is also produced by women of the Mäniyo and the Mänjo clan, Mänjäche. The social position of the Mänjo falls within the low-caste known as *gishi-yero* (*gishii-yeroo*). Notwithstanding the changes in the socio-political conditions after the collapse of the kingdom, the Mänjo, for the most part, have remained the underdogs in the socio-economic and political spheres of the territory in which they have been living. Some of the Mänjo, Huntingford (1955) notes, declare to be distinct from the Manno and belong to a nobler stock than the former. The Manno are eminent leather workers although they and the Mäniyo, two subaltern clans in a

similar social stratum as the Mänjo, have been studied here for their coffee related pottery products. The history of the dual social system (with a dominant group and a dominated one) has to be explained historically and this will be done in the next section.

7.1.2. An Overview on the History of Kafa

Lange (1982) elucidates the history of four Gonga states (Hinnario, Bosha, Kafa and Säqa) piecing together oral traditions, linguistic data and historical records. Although oral traditions suggest that Gonga dynastic rulers descended from Tigre and trace their origins from Israel and Yemen, their origins have remained hazy due to their heterogeneity and forced dispersal beginning in the 16th century. Even then, the Gonga were epitomized by the Shinasha (northern Gonga) who live north of River Abay, Anfilo (central Gonga) and Kafa and Säqa (Southern Gonga). Remains of Bosha kingdom is only represented by a small number of Oromo speaking Garo living at the junction of Omo and Gojeb Rivers. Kafa and Säqa populate the highlands between Gojeb and the Bäqo Rivers and make up the majority of the Gomora languages (Southern Gonga languages) living today. The cultivation of *ensät* is the mainstay of the southern Gonga economy while coffee cultivation and apiculture supplement farmers with extra, though inadequate, cash income. For a better understanding of the economy of the people, see chapter eight of this dissertation.

The history of the Kafecho is intertwined with the history of the kingdom of Kafa itself. Our knowledge on the early history of Kafa suffers from paucity of data. In this regard, the earliest account on Kafa was given by the Portuguese priest Alvarez (1520-1526), who had never been to the kingdom, but could record what he was able to learn while he himself was in Abyssinia (Bekele 2010; Perham 1969). A detailed history of Kafa was first written in the 17th century by Jesuit missionaries (for example, Amanuel D'Almeda, Antonio Fernandez (1613-1614) during the reign of Susenyos (1607-1632). Antoine Cecchi, who was in Kafa in 1880, is considered as the first European to provide an account on the structure of the kingdom. Prior to Ceechi, two other Europeans (Antoine D'Abbadie and Guglielmo Massaia) had reached the kingdom. Although they have left records of their stay in Kafa, they did not give any account of the political system of the kingdom (See Ceechi 1886-87; D'Abbadie 1890; Massaia1885-95 cited in Orent 1969:70). Additional information on the history of Kafa comes from the works of Biber (1905; 1910) and Enrico Cerulli (1926) (see these annotations in Orent 1969:70-71). A more comprehensive work on the history of the kingdom was produced later by Werner Lange (1982) and very recently by Bekele Woldemariam (2010).

The origin of the kingdom of Kafa is a complex yet an appealing subject to deal with. In connection with this, four distinct periods in the history of the kingdom have been recognized by Orent. These are (a) the post conquest period dating from 1897 when the kingdom saw a remarkable reorganization of the apex of the political structure and a gradual shift from identification with the emperor of the kingdom to that of the emperor of Ethiopia, b) Kafa expansion period (1700s to 1800s) - when the kingdom reached the zenith of its power under Hoti Ginotch when about 38 kingdoms and chiefdoms were its tributary, (c) the creation of the kingdom of Kafa (1500-1600) exemplified by the ''Minjo-Mato usurpation', the advent of the Gongae and the regular contact with Enarya and d) the pre-centralized period prior to 1500 when Kafa was principally settled by the Nao, Schewo, Benesho, Shé and Masango [Majangir] (Orent 1969:56; 1970a:263-266). Therefore, we merely know the names of a few of the clans or tribes from this initial pre-centralized period. Biber tells us that the Manjo, Nao, Schewo, Benesho, Shé and the Majangir were compelled to live in pocket areas within Kafa and chiefly on the borders. 'Each of these people had a king. The Mänjo had a great king and were always in Kafa land' (Biber 1920:23-68 in Orent 1969:68).

According to oral tradition, the kingdom of Kafa was founded in c. 1390 by Minjo who overthrew the Mato dynasty (Bekele 2010; Lange 1982; Orent 1970a). Three dynasties were known in Kafa since the days of its foundation. Although both oral and written sources suggest nothing about the duration of Mänjo leadership, the Mato ruled from an unspecified moment to the beginning of the 14th century. For several scholars (for example, Argaw 1994; Bekele 2010; Lange 1982; Orent 1969; 1970a), the Minjo replaced their precursor, the Mato,[65] peacefully. Another version of the way this power succession took place can be found in oral traditions indicating the role of a close friend by the name Boro, whose clan members, the Boro,[66] were privileged up until the end of the Minjo dynasty. They served as best men (*miyato/miiyaato*) and eating witness of kings, *gäbärocho* (*gabarochoo*) (Bekele 2010).

The characteristic features of the kingdom prior to the 16th century are not vividly represented in either written sources or oral traditions (Lange 1982; Orent 1970a). Nevertheless, it is known that the kingdom influenced almost all nations and nationalities living south of the Blue Nile. This came about because of the

[65] The Mato must have been playing an important role in building a strong kingdom in Kafa as the last dethroned Mato king took an oath not to forsake the kingship of the Minjo (Lange 1982:198).

[66] Regardless of the presence of several descendants of the Boro clan in Kafa, the name is currently linked with the Boro-Shinasha, people living north of the Blue Nile in Benishangul Gumuz Region (Bekele 2010: 115).

enormous wealth from coffee, ivory, civet cats, slaves and its trade routes linking the kingdom with the north, center and eastern Ethiopia. Bonga, the center of the kingdom, had commercial links with the four directions (Lange 1982:180).

Lange (1982:215) regards the political structure of Kafa as a unique and exemplary of Africa south of the Sahara. The political structure of Kingdom was thought to have been formed during the reign of *tato*[67] Bongi (1565-1605).The kingdom had hierarchy of ruling bodies, the king and the state councilors (*mikerecho*)[68]being the head of the administrative body. The king, albeit at the top of the feudal social pyramid, had limited power of ruling the kingdom based on traditional laws and customs, and his power was restricted by the state councilors, *mikerecho*[69] (Bekele 2010).

In the long history of Kafa, political power was controlled by the Minjo clan, which assumed power between the end of 14th century up until the decline of the kingdom in 1897. The kings of Kafa had many centers from the end of the fourteenth century on. These centers included Boreto, Mera (Maraa), Sheda (Shadaa), Shärada (Sharaadaa), Shonga (Shongaa) and finally Bonga (Bongaa)[70] and Andäracha (Andaraachaa). Two other clans, Dugo (Dugoo) and Boro (Boroo), had a significant place in the dynastic history of the Minjo. Both clans, considered the wisest, played a momentous role in the politics of the kingdom through counseling service to the kings of the kingdom. Whereas the Boro maintained that role up until the end of the kingdom in 1897, the Dugo served as maharishis of the kingdom beginning from the 14th century-a leadership which along with the position of the title *Kafe–rasho* (*Kaafee-raashoo*) held by Mato clan leaders and maintained this position until the Ethiopian Revolution of 1974 (Bekele 2010).

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[67] *Tato* was the title for kings of Kafa.

[68] The seven councilors occupied certain offices in the kingdom and in the court. Huntingford (1955:123) lists them based on the early works of Biber and Ceechi: *Guje-rasho* (*Gujee-raashoo*), *Kätäme- rasho* (*Katamee-raashoo*), *Ade-rasho* (*Ade-raashoo*), *Awa-rasho* (*Awaa-raasho*), *Bonde –rasho* (*Bondee-raashoo*), *Arce- rasho* (*Arcee-raashoo*) and *Sode-rasho*(*Sodee-raashoo*).
The number of the councilors varied in time from seven to twelve and later eighteen by the end of the nineteenth century (Bekele 2010:153).

[69] Evident to the limited nature of the power of the kings of Kafa, Bekele (2010:153) puts forth three different cases of which two of them are cited here. The first is that the *mikerecho* deposed two kings, *Aadiyo* Beshi Ginochi (1776-1798) and *Aadiyo* Hoti Sharochi (1798-1821), and second, Gaki Sharochi's proposal to disburse tribute instead of waging war against Menelik II was opposed by the councilors who opted for war.

[70] It was during the time of Bongie *tato* (1565-1640) that Bonga became the political center of the kingdom (Bekele 2010).

Mingled together, traditional sources of Kafa list 48 clans (Biber1920-23: Cerulli 1951 in Orent 1969:78) of which the Minjo was considered the highest clan belonging to the nobility. Even in the present day, the Kafecho still distinguish between *ogi-yero* and *gishi-yero*, high clans and low clans (Orent 1969:78). The Manjo had a king - Manji *tato,* who was chosen from the Manjo clan, called Dällo (Dalloo) and had authority only over the Mänjo. His bodyguards were drawn from the Dido (Didoo) clan. Their position in the kingdom period was limited to such activities as guarding the royal enclosures, fetching wood and water for the Kafa king and burying the dead (Huntingford 1955:136).

By the beginning of the 19th century, there was a speedy growth of Muslim states to the north of Kafa. Islam also spread in central Kafa, particularly in such areas as Tängola (Tangolaa), Kaya-Kelo and Shäta (Shataa). King Kami was known for breaking the seclusion policy of Kafa. His period witnessed a decline in the involvement of Christian slave-traders in the kingdom. The kingdom also maintained good relations with the neighboring states of Jimma, Kullo, Gera, Wolayta and Shäka. To buttress relations with these states, the king married to the daughters of the rulers of these areas, and the tradition was sustained by his successor, Gali Sharochi (1868-1890) (Lange 1982: 207, 209). The practice of such arranged marriage between ruling families was also common among the Oromo monarchies in the Gibe area and in particular in modern imperial Ethiopian history when it was used either to loosen political rivalry or to buttress political allegiance.

The kingdom of Kafa had no standing army. Even then, a small number of armed retainers known as *nao* (*naa'o*) or *wätadäro* (*wataadaroo*)[71] were kept by the king's councilors, each of the provincial governors and district chiefs. The retainers worked in their employers households in time of peace and made up the nucleus of an army when summoned for war. A call for war drew people from all sections of Kafa's population except the Mänjo, the Manno, the Ebbo, the Yoyo, and slaves (Huntingford 1955:127).

The reign of *tato* Gaki Sharochi (Chinti) (1890-1897), the last king of Kafa, was marked by a strong military engagement to protect the independence of the kingdom, and keeping peace and order in the kingdom. (Lange 1982:213), it did not materialize and the Kingdom, though presented a stiff and protracted military resistance, was eventually incorporated into the expanding Ethiopian state in 1897(see Bahru 2002; Bekle 2010; Huntingford 1955). Having read the history of the kingdom, one might mull over the questions how

[71] The etymology of this word is the Amharic *wätadär,* soldier.

did Kafa survive as an independent kingdom until its incorporation to the Ethiopian empire in 1897? How did the kingdom present one of the stiffest resistances to Menelik's army in the wake of the victory of Adwa? A detailed elaboration to answer such generic queries could not be provided here although it would be important to indicate three core factors that Bekele (2010:149) consider crucial: the presence of a strong defense[72] system, a unique political structure and the control over trade routes linking the center of the kingdom with northeast, northwest and east coast of Ethiopia.

7.1.3. Religion

In this section, we shall briefly see three different religions practiced in Kafa beginning from the days of the kingdom, traditional religion, Christianity and Islam. The supreme deity of the Kafa king was called *yäro (yaroo)* - the sky god whose importance gradually diminished after contact with the Christian God. The dominant religious practices of the Kafa centered on a traditional spirit called *eqo* (*eqoo*) (Huntingford 1955:132). In the days prior to the introduction of Christianity and Islam, this traditional spirit was commonly worshipped by each clan, which could revere more than one spirit (See Bekele 2010; Huntingford 1955). The term referring to the person hosting such spirit is called *alamo* or *nayo* (*naayoo*), believed to have an exceptional skill of healing ill people using traditional medicine and foretelling the future of an individual (Bekele 2010). For the purpose of simplicity, I will consistently use the term *alamo* referring to persons possessed by *eqo* -the elemental spirits that live in trees, bushes and running water. It is believed by the Kafecho that certain persons can cause *eqo* by means of ritual performance to leave their usual abodes and take up temporary residence in their own bodies (Huntingford 1955).

Most clans had their own *alamo*, a person possessed by the spirit of his father. The duty of an *alamo*, as a matter of rule, was kept classified from the "eyes of foreigners" for it is commonly believed that *eqo* (spirit) will kill the *alamo* up on the disclosure of his deeds (Cerulli 1951 in Orent 1969:83). There are also other restrictions to which each *alamo* should remain respectful. For instance, an *alamo* is required not to eat in

[72] Although the kingdom lacked a standing army, it had strikingly effective defensive trenches still visible in many parts of modern Kafa. Weapons employed in warfare of the kingdom include different lances, swords (*kusho*/*kushoo*) of different size, shields, *watäyo (waatayo*) made of skins of buffalo and hippopotamus, some of which were embellished with iron sheets. Bows, arrows, and a few rifles called *qäwo (qawoo)* were also used. Drums beaten in a relay system from borderlands to the center signaled the approach of the enemy, and this was considered as a call for war (Bekele 2010:231-232).

any other man's house except that of another *alamo*. He is also not permitted to let in or shake hands of an individual of the low crafts clans into his house unless he turns out to be an *alamo* himself. Besides, he can shake hands neither with any one of the later clans nor with anyone who has touched mutton or cabbage. He must eat food prepared by a special cook, or by one of his wives. He also has to eat and drink out of special utensils. Any infringement of these rules will be met by the rage of the *eqo*, normally manifesting itself with death. The person who serves and administers other needs of the *alamo* is known as *gäbärocho.* During his stay in Kafa, Amnon Orent witnessed the degree to which the people of Kafa made use of the *alamo* regardless of their religious affiliation to Christianity or Islam. Orent's account of his observation on this subject indicates the presence of thousands of *eqo* houses, and that each session with an *alamo* starts with pouring coffee for the *eqo* in special cup rather than serving everyone else. The *alamo* has a special cup, but before he drinks his own he pours out the cup for *eqo* on the floor as a sacrifice, *ɔorro*. He will then sit part of the night and mull over the different questions from persons nearby a fire made of a unique fragrant wood known as the *yafo* (*yaafoo*) tree (Orent 1969: 225, 228-229). The role of coffee in Kafa society, its manipulation by the *alamo* in telling fortunes and the practice of *ɔoro* in contemporary *Kafa* will be discussed in chapter ten of this dissertation.

Akin to the traditional belief in the spirit called *eqo,* the kingdom of Kafa acknowledged two monophysite beliefs, Christianity and Islam, perhaps at about the same period-the 16th century. Historical documents ascribed to different historians (for example, Beckingham and Huntingford 1954; Huntingford 1955) indicate that Christianity got its way to Kafa through the agency of Sarsa-Dengel (r.1563-1595) of Abyssinia. Ancillary to the above supposition, Huntingford (1955) puts forth the role of the governor of Enarya, Sepenni, who allied to Sarsa-Dengel was also involved in the introduction of the religion and has become an iconic figure in Kafa legends portraying him as Christian hero. On the other hand, Beckingham and Huntingford (1954) draw attention to the forced conversion of Bosha before Kafa and argue against the claim that Kafa had been Christianized prior to the 16th century- a suppressed view even if maintained by a section of the people of Kafa. To the other end of the spectrum, there is a view that questions the period of the introduction of Christianity to Kafa and hence puts the historiography in a state of ambivalence. The work of Bekele (2010) runs in this track as it boldly states the absence of any proof to assertively state when and who introduced Christianity in to the kingdom. Evident to this, he presents the church of St. George at Baha, thought to have been constructed ca. 1532 as an example, and upholds the view that

Christianity spread subsequent to the raids of Ahmed Gragn.[73] This argument about the period of the establishment of the church of Baha, although based on a rather different historical trajectory in Ethiopian history, fits well into the chronology established by other historians (for instance, Beckingham and Huntingford 1954; Huntingford 1955).

The Capuchin mission began to work in Kafa in 1855 under Father Ceasare di Castelfranco who died in 1861 and Father Guglielmo di Piona, better known as Cardinal Massaia. The Capuchin missionaries were driven out of the country and missionary work ceased until the Consolata Fathers (Turin) took up the work again in 1916. The Consolta Fathers began their work owing to the difficult circumstances of the time, in the guise of traders, and one of their achievements was the introduction of tea planting in Kafa. By 1840 the number of Catholic in Kafa was put at about 6,000 (Huntingford 1955:134)

Islam was another religion introduced to the Kingdom of Kafa. Its introduction into the kingdom has been credited to traders (*nägado/nagaadoo)* during the reign of Wodi-Gafo in the 16th century. Nowadays, a good number of the followers of this religion are traders and rich men in the society (Bekele 2010). Related to the position of Islam in the kingdom, Huntingford (1955:134) recapitulates Biber's account of 1908 in which a Muslim Kafa man named Taha recounts that his ancestors came to Kafa from Mecca by way of Harar. According to his description, they were all *sheiks* and traders and had friendly relations with the king of Kafa though they did not follow the religion of the *eqo.*

7.2. The Majangir

In this section, I present the socio-cultural and historical circumstances of the Majangir based on ethnographic and anthropological studies of the past (mainly Cerulli 1956; Stauder 1968; 1971; 1972) and Ren' Ya Sato's anthropological studies in recent years (Sato 2002; 2007). Cerulli's book, *Peoples of Southwest Ethiopia and Its Borderland* (1956), was prepared based on his experience and annotations from preceding works (mainly Broto 1947; Mantandon 1913 and the Sobat-Pibor report 1922).

[73] It is a nickname given to Ahmed Ibrahim al Ghazi, a famous Imam who conquered most of the Ethiopian highlands between 1527-1543 (Henze 2000).

7.2.1 Socio-Cultural Perspectives

The Majangir are among the Nilo-Saharan people living in the forested region of southwest Ethiopia (Bahru 2002; Cerulli 1956; Murdock 1959; Sato 2007; Stauder 1968; 1971; 1972). The territory inhabited by the Majangir stretches between the area north of the Baro River near Dembi Dolo and Erbu River in south. Subsequently, the Majang territory is flanked by their Cushitic and Nilotic neighbors in the east to their west. In the former are the Oromo, Mocha, Shäkko and Gimira; while the Anuak [Anyuaa] and Nuer are in the later cluster. The Majangir were targets of a series of raiding for women and children by their own neighbors principally by the Oromo, Shäkko and Gimira, the Amhara and sporadically by the Sudanese Arabs. Before late 1970s, the Majangir were non-village societies and lived in dispersed settlements, a factor which simplified fleeing from raids (see Stauder 1968; 1971). Even now, several Majangir communities live scattered in the rural environs of Teppi and Gambela. Likewise, the pattern of Majang settlement in the outskirts of Teppi and Gambela area is evident to the persistence of non-village societies.

Nowadays, the territory inhabited by the Majangir range from south of Gurafärda to small forest around Metu. They live in forested villages covered with such big trees as *Anginigera altissima, Cordia africana, Celtis zenkeri*. The forest, apart from swidden agriculture, provides the Majangir with diverse resources: collecting honey and hunting forest animals (for example, bushbucks, duikers and bush pigs) being the most important (Sato 2007:3; for more on the economy, see Stauder 1968; 1971). In chapter eight, we will read the economic activity of the Majangir based on data from historical documents and ethnographic present.

The Majang language is part of what Harold Fleming (1983) calls the “Surmic cluster” though it is the most detached in the group. Concomitant to this, Bahru (2002) describes the present day geographical niche of the Majangir as marking “the southern end of the Nilo-Saharan corridor.”

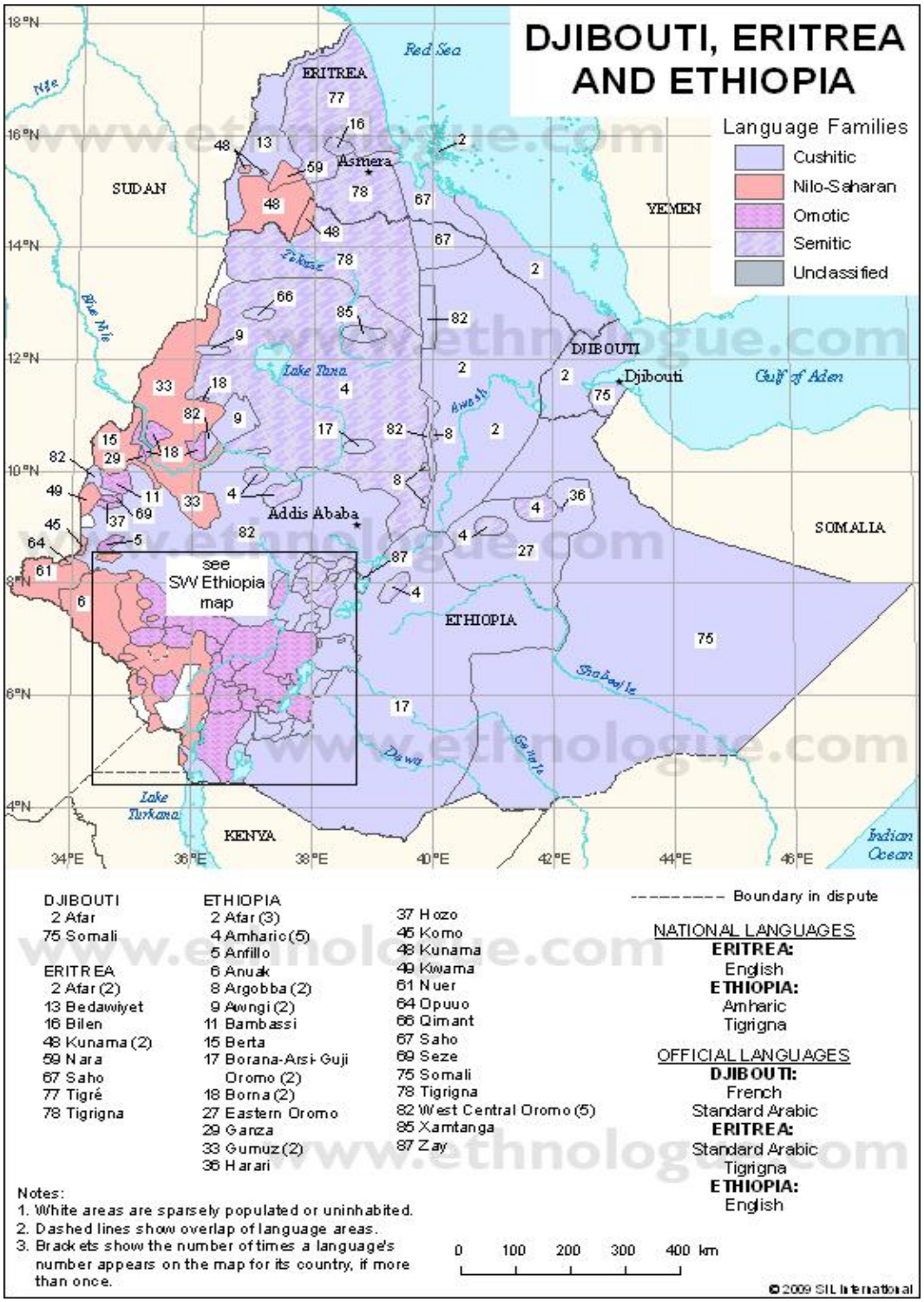


Figure 7.8. Linguistic map of Ethiopia, Djibouti and Eritrea (After Lewis 2009).

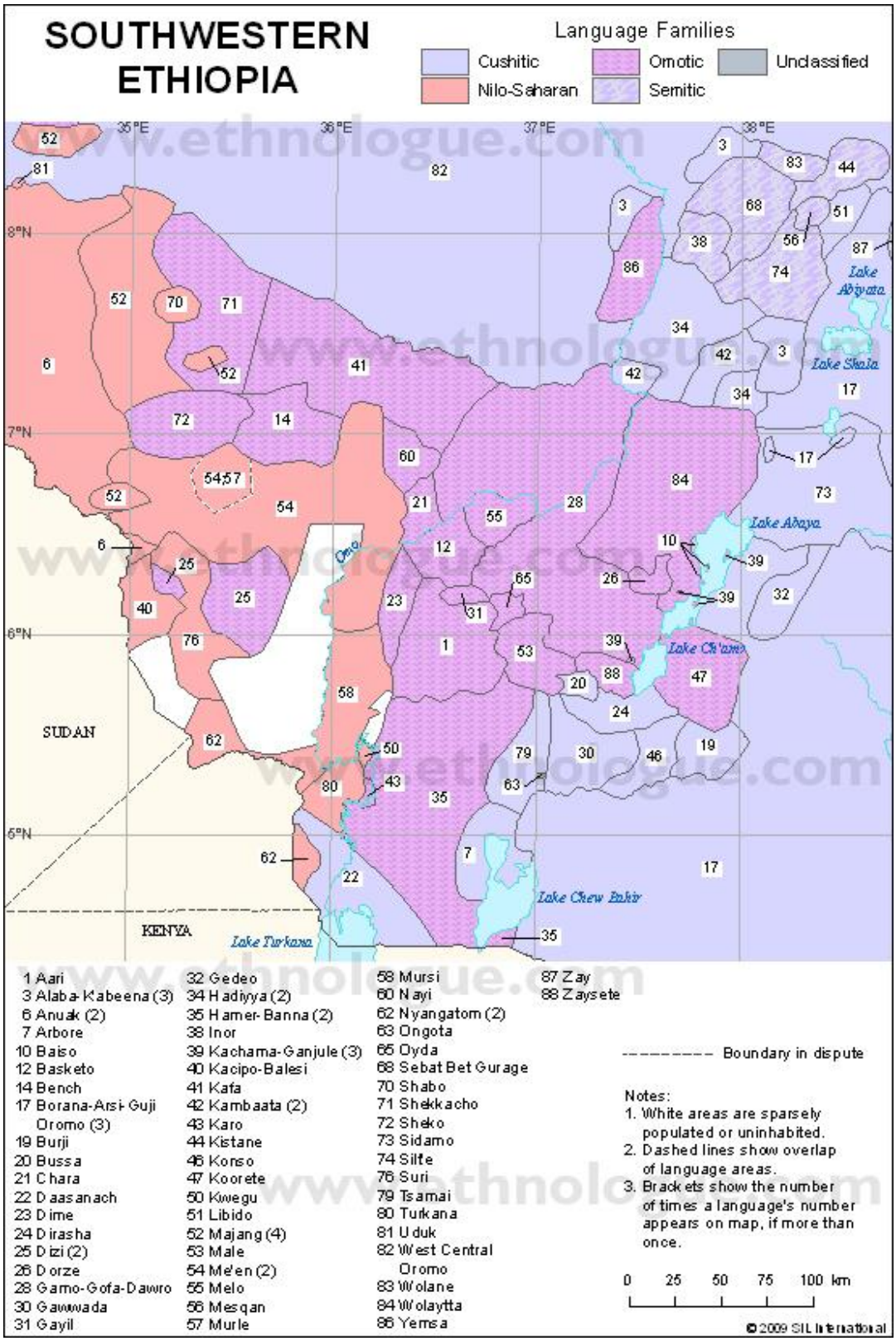


Figure 7.9. Linguistic map of southwest Ethiopia (after Lewis 2009).

The Majangir use the term *wai (waai)*, a much-overloaded term to refer to such concepts as domesticity, settlement, women's hut or home and even to signal an entire homestead[74]. Although kin relations are determinant in joining a domestic group, a concept that embodies some rights and obligations,[75] husband and wife are eligible to join the same domestic group. There is also a conspicuous difference in terms of specialization in household activities. Men provide homemade tools (for instance, baskets, wooden-mortar and pestle for grinding and handles for iron tools), prepare honey-wine (*ogol*[76]*/ogool*), and construct huts for domestic units. On the other hand, women cook and provide evening meals and drinking for a domestic group. Simple food can be prepared at any spot if there is fire and demands little or no requirement for cooking utensils. Women take a complete responsibility to prepare porridge and corn bread. Cooking of these major meals once every day requires some techniques of preparation and equipment. The preparation porridge is a laborious task that calls for collaborative actions. Main meal is served towards evening in the presence of group members. Although the Majangir do not like eating without a company, who should and should not eat together has been restricted by some general rules. Accordingly, prior familiarization was essential if male and female are to eat together (Stauder 1968; 1971).

Marriage and Body Decorations

Three different categories of marriage are discernable in Majang society: *wawan (waawaan), luk (luuk)* and *obod (obood)*. The first type of marriage (*wawan*) is arranged for couples who have acquaintance for a long time. This type of marriage is acknowledged by the families of the two partners. Preparation on both side include preparation of *tu'un*, ointment made of plant sap, which after mixing with ochre, is smeared on the body of the girl (bride). *Luk* is a second category of marriage often driven by pregnancy before weeding ceremony accomplished regardless of the interest of the families of the two parties. Although a vanishing tradition, the third, and the last type of marriage, *Obod,* involves abducting a girl after which reconciliation is made between families. This type of marriage represents a vanishing tradition (Shäka Zone Government Communication Affairs Directorate (SZGCD) 2012:38-39). A woman has the right to marry her brother in

[74] The Majangir homestead mainly comprised of a hut *(wai)* for a married woman and her husband's hut (*depo/depoo*) built apart from each other (Stauder 1968; 1971).

[75] For example, group members can take uncooked food without any prior permission while authorization is necessary if one is to take cooked food (see Stauder 1968; 1971).

[76] *Täj* is its Amharic equivalent.

law or any one unrelated to her deceased husband (Stauder 1968; 1971). Oral tradition suggests that a man could marry more than one wife. What was expected from him was sustaining his family with food and constructing a house. Dowry was given by the family of the young man to the bride-entailed ax, spear and beads, a tradition that has virtually vanished giving way to modern ways of marriage. Polygamy, though of lesser scale, is still practiced among the Majangir.

At Goji, where the Gid'ir (Gidhiir) clan is presumed to constitute the largest part of the community, there is intermarriage between different clans living in the area. Marriage between kin members is not allowed. Traditionally, when a boy wants to marry a girl, it is often common to make sure if the couples could match well in terms of personality, and if the boy could sustain the girl economically. The person proving these important matters could be the future best man of the boy. Then, both the boy and the girl are advised on how to strengthen their relations to build up a family. Up on marriage, the girl is decorated with a mixture of *gulo* (*guloo*) - castor oil plant (*Ricinus communis*) and red soil called *goräy* (*goray*). This is done by her friends away from her parents. Gifts to the girl include beads and *abujädi*- a garment to be worn below her waist.

The Majangir used to paint their backs with red ochre and make very complicated patterns of scarification (Brotto 1947:49 in Cerulli 1956: 49). Apparently, many aspects of this tradition have vanished since Broto's time, and only a few of the elderly women in the study area have a memento of the practice of decorative scarification on their body principally around their nipple and their back.

7.2.2. History

The history of the Majangir, like many ethnic groups in borderlands, is peripheral to the historiography of Ethiopia. Our knowledge about the socio-cultural and economic conditions of these people mainly comes from anthropological studies of Jack Stauder (1968; 1971; 1972) and other early works prior to the first half of the 20th century: Broto (1947), Mantandon (1913) and the Sobat-Pibor report (1922), sources annotated by Ceechi (1956). During emperor Menelik's campaigns of incorporating the different people in southwest Ethiopia, the Majangir were subdued by *Däjazmach* Tässäma Nadäw who marched from Gore to the territory inhabited by the Majangir (Perham 1969:295) - a process that took place at the close of the 19th century.

Traditionally, the Majangir had a very egalitarian society lacking prominent political leaders[77] (Markakis 2011; Stauder 1968; 1971; 1972). The *"tapad"*'[*taapaad*], also called *tapat* [*taapaat*], people who also served as ritual leaders, were the only people with chief-like leadership[78] functions (Stauder 1968; 1971; Unseth and Abbink 1998), and were considered to possess peace-keeping power (Sato 2007). They usually have over 70 clans,[79] with clan identity passed down through the male line. Neither marriage within a clan nor with a person from a mother's clan is possible (Stauder 1968; 1971; Unseth 1998a).

Before the advent of Christianity in 1970s, the Majangir had a traditional belief at the center of which was a spirit called *sakawos* (*saakaawos*). Fidee-opii- the spiritual guru of the traditional belief and the head of clan leaders-had a twofold role of presiding over the traditional belief and administrating the clans. Tradition has it that each clan had its own spirit identified with such appellations as Sanqa (Sanqaa), Kabular (Kabuulaar), Totukän (Totuukan), Nagaw (Naagaaw), Gipir (giiphiir), Kayis (Kaayiis), Kur (Kuur), Gariyär (Gaariyar), and Kurmay (Kurmaay). The *tapad* was a spiritual head at clan level. A *burjuyab* (*burjiyaab*) was a messenger entrusted to pass on information from the *tapad* to the public through a second courier called *lanoyin* (*laanoyiin*).

The ritual leaders are always from the Melanir (Melaaniir) clan, distinguished from other clans by the fact that only the members of this clan were buried in caves, while others were buried only in holes dug down in the ground. This was done only in areas where caves were available and it was not a rigid requirement (Unseth and Abbink 1998:109).

A Majang domestic group could uphold ownership of land it had cleared until it re-grew forest; they also had collective rights over uninhabited, uncultivated areas and wilderness. Three categories of Majangir territory have been described by Stauder (1968; 1971): traditional territory regarded as bequest from ancestors,

[77] The Majangir had neither rulers nor chiefs or council of elders. In the absence of any form of corporate lineage groups, therefore, informal leadership exercised based on such criteria as relative age, experience, skill, personal influence and social relationships was imperative (Stauder 1968;1971).

[78] The secular *tapad* though exercised administrative responsibilities on behalf of the central government, used to side with the community in their non-cooperation with the police who unethically took advantage of their position to exploit them (Stauder 1968; 1971).

[79] Majang elders in Yäki district assert the presence of over 100 clans, a view that accords with the large number proposed by scholars who had studied the Majangir.

ritual territory (*tapd*'s territory) and governmental territory under the administration of a secular *tapad,* who had administrative duties on behalf of the central government. Stauder also explicates that the Majangir owned communal rights over unoccupied, uncultivated land and wilderness with all traditional rights to exploit forest resources including wild food products.

Prior to the 1970s, the Majangir lived in dispersed settlements comprising a small number of households constructed in forests. There is, in fact, a nexus between water and settlement pattern. Accordingly, elongated settlements are formed along rivers and streams while cluster settlements are common around springs and water holes. Even then, dispersal was seen as advantageous for it provided a certain degree of privacy related to sexual affairs and covert events (for instance, intentional hiding of games to avoid collective sharing). However, the Majangir highly value the very concept of neighborhood for sharing such consumable items as honey-wine (*ogol*) and coffee (*kari*). Stability of a given Majang homestead was partly facilitated by the presence of immovable properties both in huts and cleared fields known as *shampai* (*shaampai*). Nonetheless, site abandonment, a process that illustrates the temporal dimension of settlements could occur after few or some years. In most cases, the people recurrently change settlement areas periodically due to different reasons: ecological factors, intense relations with neighbors or such push factors as looting and fighting. High death rate among the Majang was another factor that increased the rate of shifting settlement spots as their tradition prohibits settlement at a site where death has occurred. A planned mobility from a settlement entails some elements of secrecy. Accordingly, persons planning to move leave the area in the name of visiting neighbors (Stauder 1968; 1971).

Two types of settlement abandonment discernable in Majang society have been explained by Sato (2003): one in which a single or few households moved from a settlement, and complete abandonment of a settlement. The latter was caused by different but such major push factors as invasion of cultivated areas by re-growing forest or grass[80] (Stauder 1968; 1971), inter-clan conflicts, death of a *tapad*, raids from neighboring ethnic groups and sorcery. Social insecurity caused by raids and conflicts was a major problem resulting in settlement abandonment in the period preceding mid 20th century. Until the 1960s, Majang settlements experienced a decline in the tempo of village raids and fizzling out of slave captures. However,

[80] In such conditions, a domestic group tends to move to new fields than to engage in labor intensive clearance of the invading grass/ trees and this process resulted in a total abandonment of old settlements thereby facilitating break-up of settlements (Stauder 1968;1971).

conflict among clans continued to be the prime cause of settlement abandonment (Sato 2007:4; See Stauder 1968; 1971 on intense neighborhood relations and spatial separation). Stauder's reflections on the socio-cultural and economic situation of the Majangir territory in 1960s have been viewed by Vaughan (2003) as indicative of the onset of a socio-economic transition in reaction to internal and external stimuli. This period was described by Sato (2002:187) as a prelude to Majangir modern history, an opposite portrayal of the changes happening within the Majangir society.

Two major historical episodes that transformed the living conditions of the Majangir were to take place concurrently in the 1970s: evangelization and villagization. The process of evangelization was an external stimulus of the religious ideology: a paradigm that began about 1971 following which a large section of the Majangir has become Christians (Hoekstra 2003; Sato 2002). Villagization policy of the Derg regime (1974-1991) was put into effect in the late 1970s and was acknowledged by the Majangir. In the process, several administrative villages comprising hundreds of people were established. Sato (2002) recaps that villagization process in the district of Godäre began in 1978 because of which a number of sedentary villages with village heads were established. Simultaneously, settlers accepted Christianity and constructed churches at the heart of their villages. At about the same period, a similar process of villagization and evangelization was taking root in my study area in Teppi vicinity, Goji. Priest Enkiyas Gonti Sanqa (55 yrs), my informant from Goji, remembers the early days of evangelization process in the area as follows:

> The missionary activities were run by Presbyterians preaching the Gospel in Godäre and Gambela. They were from the Sudan. Harvey Hoekstra was the missionary who was teaching the Majangir in Godäre. He came to Shuma in 1973/4 where he met six people including myself, who was only 16 by then. The missionary used to live near the area known today as *ayär-meda* [Amharic term for Air- port]. We were taught in the forests about the gospel. Between 1973/4 to 1976/7, the gospel was preached around *ayär-meda.* The group of six people began teaching the Majangir living in Yäki district. Gospel was preached by men who had to travel the whole day through the forests to reach the Majangir living as far as the Alamo area along the border between Yäki and Kafa.

In Gambela Regional State, where quite a few ethnic minority groups are known, the Majangir (numbering about 60,000) are considered as one of the 'representative ethnic groups' (Desalegn 2011; Sato 2002). They stand third in numerical terms only after the Anyuaa and Nuer. Nonetheless, their habitation stretches

over the boundaries of three Regional states: Gambela, Oromiya and Southern Nations, Nationalities and Peoples Region (SNNPR). Subsequently, there were successions of conflicts relating to regional boundaries around Teppi[81] and Bäbäqa. The Majang were adamant that they could be included in Gambela, though they were ultimately making every effort to institute a Majangir zone (Sato 2002:192) and eventually succeeded in materializing that in 2005/6 with the town of Meti in Gambela Regional State attaining the status of the administrative headquarter of the zone.

Taking into account the traditional conception of ''Majangirland'' and the absence of effective state machinery over a large part of their territory during the Imperial period [82](see Stauder 1968; 1971), the subsequent changes in the thinning of the 'ecological niche' occupied by the Majangir in the 1960s have been striking. These changes were indeed sufficient to provide a milieu to recent struggles (Vaughan 2003:273). Of the many factors which contributed to this episode in the quest for ethnic territory, Sato (2002) reflects on evangelization and villagization as the key forces behind the steering wheel of this historical process. The teachings of Protestant missionaries, particularly the indoctrination of the biblical concept of equality before God, and the remarkable impact of villagization on a fluid traditional way of life, were central factors in the process. A view that accords with the earlier proposition of Sato has been set forth by Vaughan (2003), who considers evangelization and villagization as perceptible catalysts, which had shaped the structure and the valor of the Majangir long before the transition to the ethnic federal period. Vaughn (2003:273) also accentuates on the process of categorization, a characteristic feature inherent in ethnic federalism, as an equally important dynamic that apparently stirred-up Majang determination to develop into a 'nation, nationality or people.' Vaughan further considers the vigorous move of the Majangir

[81] Based on his anthropological fieldwork among the Majangir (November 1964-September 1966), Stauder (1971:2) notes that a number of Majangir living in Teppi area were evicted of their lands owing to the beginning of a large-scale coffee plantation in the area, a process that had started in 1950s. In recent times, three factors which had increasingly escalated Majang mistrust on their neighbors in the region of Teppi have been underscored by Sato (2002): (a) Teppi had traditionally been considered by the Majangir as part of their traditional territory (i.e. Majangirland), (b) Relations between Shäkkächo and Majangir had long been abysmal, and (c). Majang leaders had been in touch with the SPLA (Sudan People's Liberation Army). Based upon research conducted in the area during June and July 2002, Vaughan (2003:272) confirms "…each of these three issues was clearly still in play in the run up to the outbreak of violence in March 2002.''

[82] Not all the Majangirland was known to the imperial administration of Haileselassie I. Although many parts of the territory were reached through expeditions aimed at exacting taxes, some lands were entirely neglected. For instance, at the time of Stauder's study, the areas between Godäre and Shiri Rivers and between Dawar and Bäqo-Gilo Rivers experienced no state presence, at least nominally, through delegated representatives from central government (see Stauder 1968; 1971).

as a comparatively delayed effort of delineating their homeland and hence, regards it as a sluggish step to the line-up in "ethnic-territorial game." The extension of coffee plantations in the land of the Majangir is a source of conflict still today. This is particularly true in areas west of Teppi where they are covering large tracts of land formerly occupied by forests used by the Majangir. Conflicts are also becoming sporadic between the Majangir and settlers engaged in the cultivation of coffee. In the course of this ethno-archaeological research, two evident conflicts have been reported from the district of Godäre, particularly at Yäri and Meti.

7.2.3. Settlement Pattern

Settlement, unlike the pre 1970s period of Jack Stauder (1968; 1971), has now become sedentary although a site could be abandoned as people change their living areas due to economic reasons. Such movements are partly necessitated by different factors, selling land and buy a small plot of land to live on or move to other areas for work. Contrary to the past, a household is inhabited by family members: a mother, a father and children.

The settlement pattern in the study area is characterized by the presence of group of households along footpath with a few meters interval separating a group of households from the next group of settlements within Goji. Coffee trees are common in backyards growing along such variety of fruits as avocado and banana, sugarcane, tubers and vegetables (details on the type of plants cultivated in home gardens and outfields shall be presented in chapter eight). The Majangir construct different types of houses for a variety of purposes. Compounds are usually encircled by coffee trees, different types of trees or dwarf bushes. They give little or no attention to fencing compounds. Even in such areas where they live in large numbers as Goji in Addis Berhan, Fide (Fidee), Shay (Shaay) and Dängärächi (Dangarachii) in Depi (Depii) a large number of households are located far apart and unfenced. In most cases, therefore, neighboring households identify trees, stones or bushes as markers of boundary-a memento of their egalitarian ethos.

Traditionally, the Majangir construct mud-plastered houses with thatched roof. A living hut often comprises of space for cooking where such pottery products as *d'äyen-budena*[83] (*dhayen-budeenaa*) - griddle for baking Ethiopian pancake known in northern highlands as *injära* and *d'äyen-mu'eko* (*dhayen-mu'eekoo*) -

[83] *Budena,* a cognate term for *injära*, is a term borrowed from the Oromo.

griddle for roasting coffee (also for bread), *kebet-karionk* and *kebet-sid'anonk,* two bowl shaped pots used in preparation of *kari* along with other pots used for cooking and storage, are kept. These items are usually stored nearby *koytak* (*koytaak*), a hearth consisting of three to four stones or broken pots. The hearth is mostly placed under *palle (pallee)*-a wooden structure with four supporting pillars over which maize (*makäle*) and sorghum (*mashile*) are kept to protect the seedlings from pests.

Figure 7.10. A Majang village at Goji, near Teppi.

Cooking space mostly occupies the rear of a living room in case where there are two to three separate rooms for different activities: storage, sleeping and collective activities such as eating meal and drinking coffee. During rainy season, cooking is confined to a living room, but for most part of the day women do most of the task in front of a living room. Trees are, thus, important in providing shelter from the blazing sun in drier months of the year. It is, therefore, common to see women cooking outside at daytime. Morning hours are (7:00 am-9:00 am) and are, however, part of the day where morning coffee (*kari*) is shared with

neighbors in a living room. A central wooden pole (*tusi /tusii*) supports a thatched roof of a circular or a rectangular hut, where as the number of pillars could reach up to three in case of a large rectangular hut terminating with curve shaped tangential ends.

Figure 7.11. A house under construction.

Men take the responsibility of constructing a house, and learn the skills of construction beginning from childhood. Both male and female children in the study area have been observed mimicking and practicing construction using sticks and leaves of banana. They spend the day playing and practicing cooking, particularly preparing *kari*.

Figure 7.12. A child practicing cooking.

Regardless of the warm weather condition in the study areas, most Majang-houses are windowless and where they exist, they are very small wooden windows to allow ventilation and entry of light. Most houses have wooden-doors facing footpaths connecting households in villages. In rare cases, houses have front and rear doors in which case the value of the rear door is limited to such utilitarian use of serving as an exit to a backyard where cooking can take place. The variation in the design of customary houses made by the Majangir is presented at the end of this section. Still, there is a high degree of attention to the beauty of the interior than the exterior of their living room. Contrary to their Shäkko neighbors, the exterior in most cases has not been mud-plastered although few Majang houses are decorated on the exterior in simulation of the former.

Figure 7.13. A Majang house decorated from exterior.

Majang men used to wear a loincloth with bunch of leaves attached in front and behind. Both sexes may also wear an apron of very long leaves. Ornaments are of brass, glass, bone, leopard or snakeskin (Broto 1947:95 in Cerulli 1956:48).The dressing style of the Majangir reported by historians and anthropologists is only recalled by the elderly who witness the rapid transformation that has been taking place over the last few decades.

Figure 7.14.Group of Majang preparing to dance to music of trumpet. Notice the loincloth and apron of very long leaves (after Stauder 1968).

Figure 7.15. A small drinking party in front of a hut (after Stauder 1968).

Common coffee, among the Majangir, is frequented every morning, is used to bolster relations, and implies proximity between neighboring homesteads. Their coffee known as *kari* is an infusion of wild coffee leaves and branches of wild coffee (*Coffea arabica*) with a mixture of red peppers and such aromatic plants as garlic, ginger, onions or salt shared by closest homesteads (Stauder 1968; 1971 and ethnographic fieldwork). They also make two alcoholic drinks: one prepared from grain, "*tajan*" (*taajaan*) and another from honey, *ogol* (Teramoto *et al.* 2005). In the past, sharing beer constituted part of the commensality rituals of the people (see figure 7.15) although evangelization has largely resulted in the fading of the tradition in the study area.

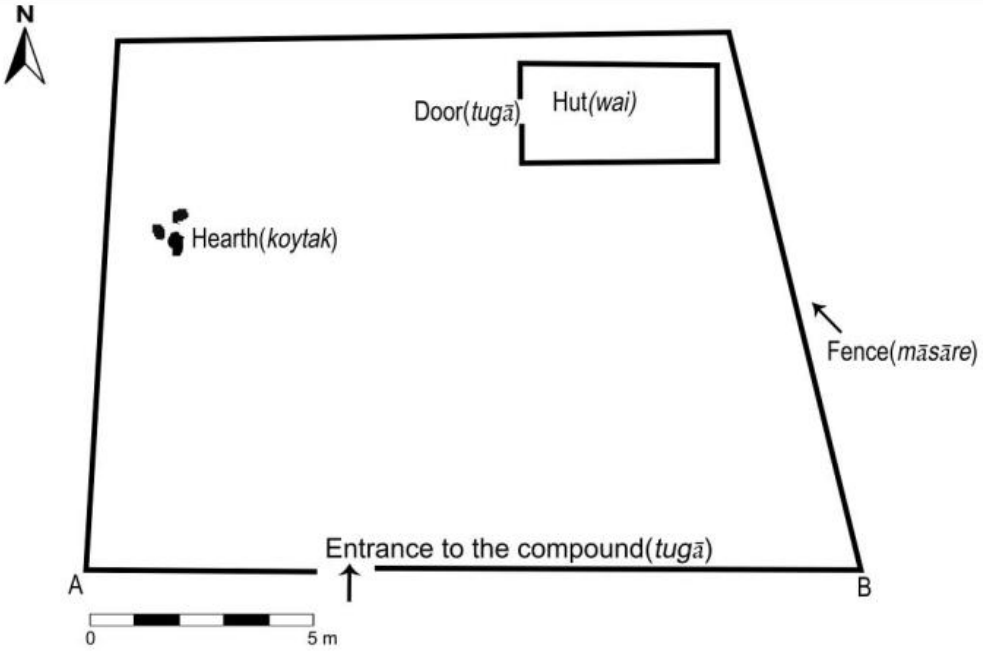


Figure 7.16 a. Plan of a quadrilateral Majang compound with a rectangular hut (*wai*).

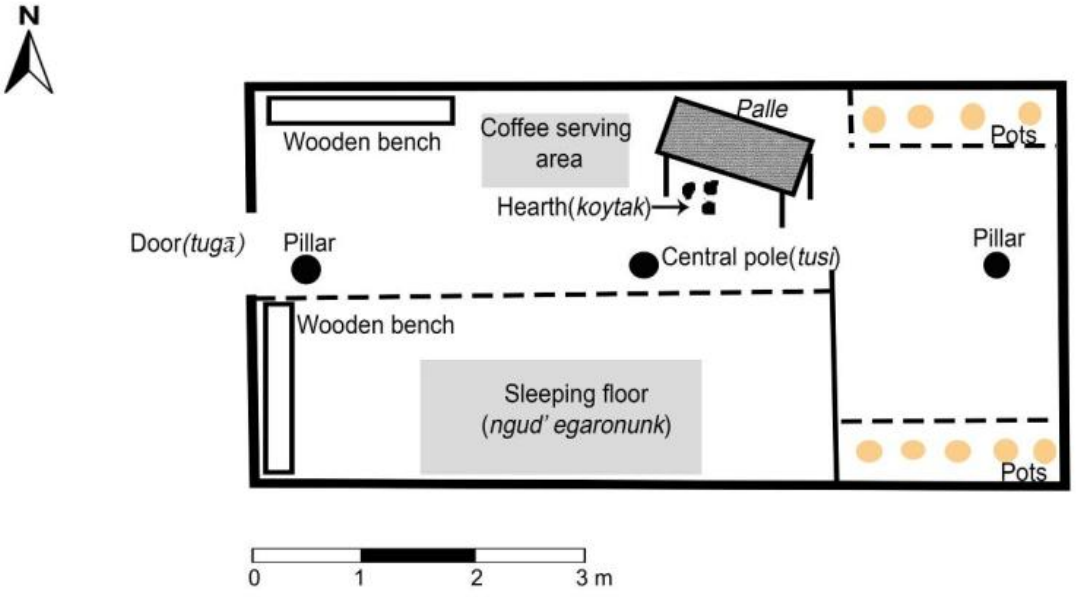


Figure 16b. Plan of a rectangular Majang hut (*wai*)

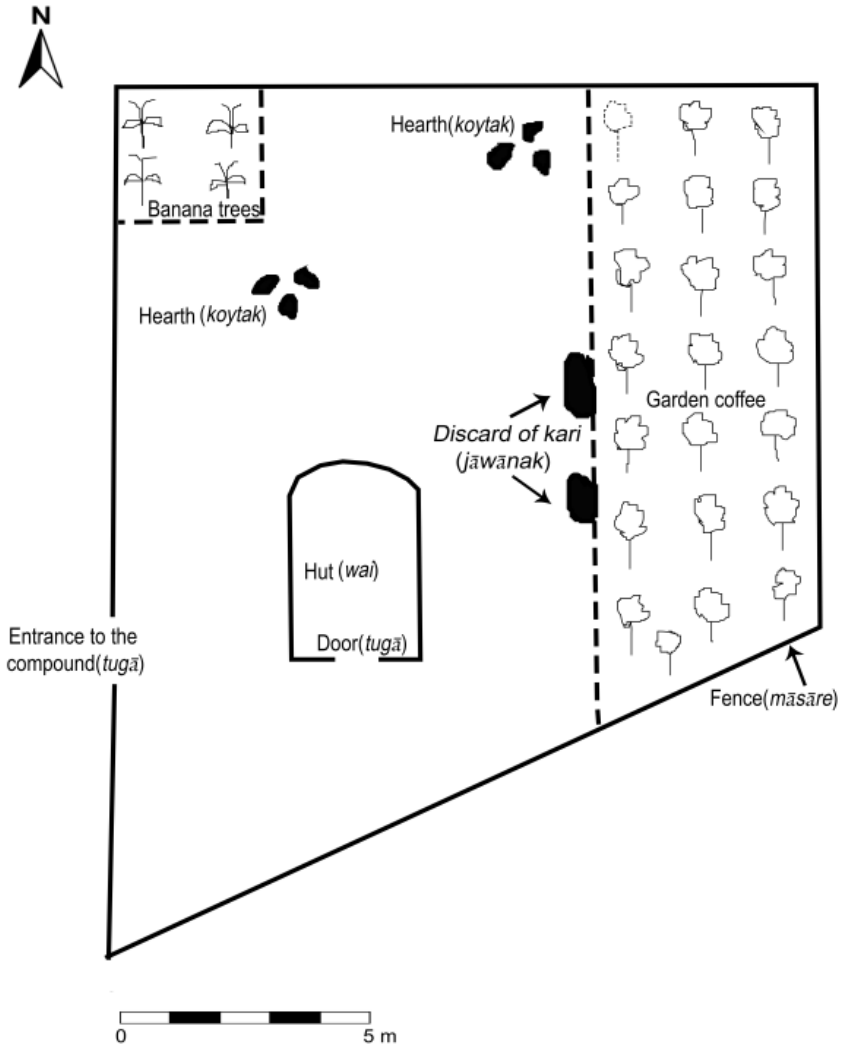


Figure 7.16c. Plan of a quadrilateral Majang compound with an elongated hut (*wai*).

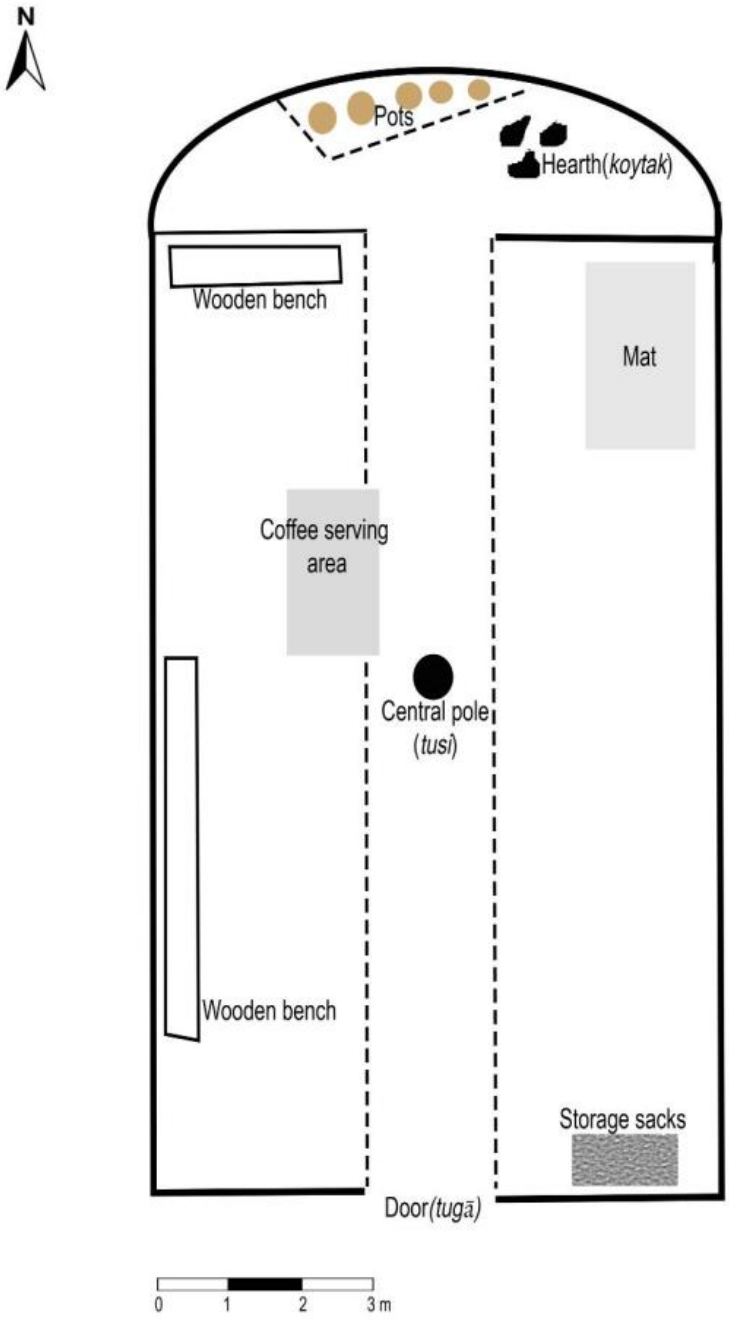


Figure 7.16d. Plan of an elongated Majang hut (*wai*)

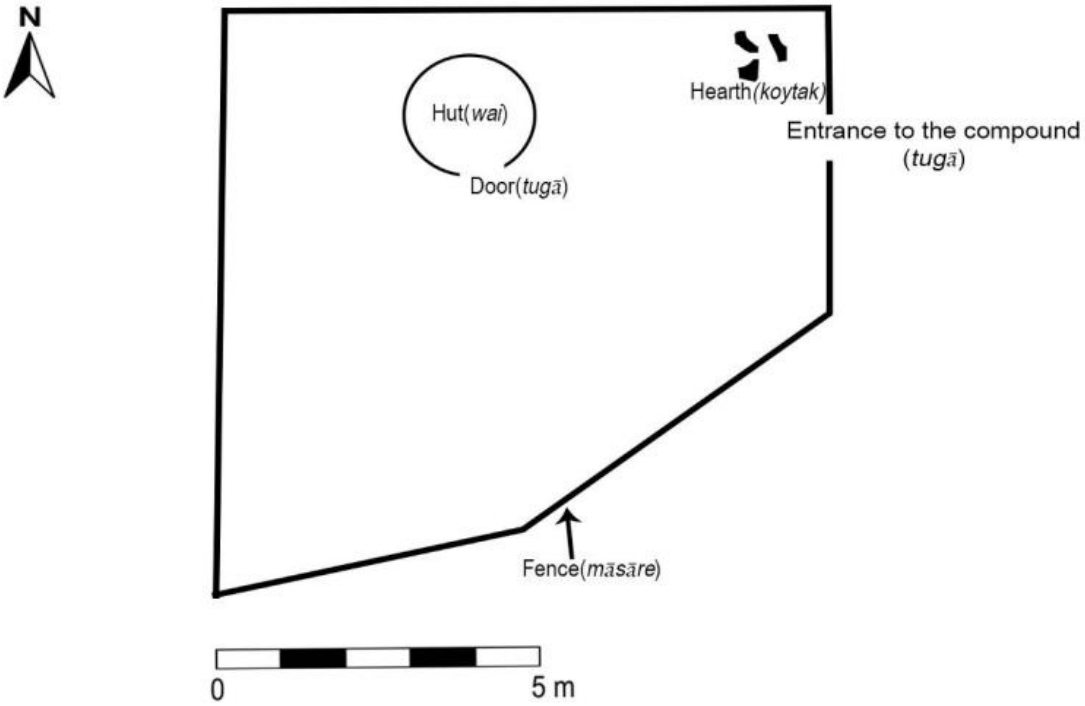


Figure 7.16e. Plan of a quadrilateral Majang compound with a circular hut (*wai*).

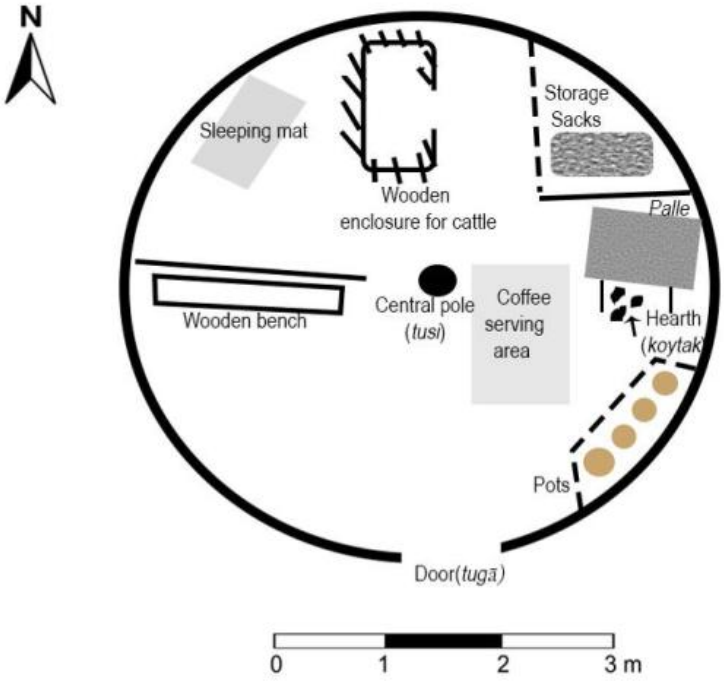


Figure 7.16f. Plan of a circular Majang hut (*wai*)

As one can see from plans of the houses, the Majangir have continued reproducing elongated buildings, often absidal which represent the typical layout of Majang houses. It seems that what has changed is the exterior, formal part of the building, not the interior.

7.2.4. Burial Custom

A deceased person, among the Majangir, was buried in circular graves with compartments dug sideways. The corpse was first wrapped-up in the bark of *tänghi* (*tanghaay*) tree and tied in squatting position; then buried in a grave. This description given by my informants at Goji accords with the observation of Broto (see Broto 1947 in Cerulli 1956:50). According to informants, a deceased was buried in circular graves about 2 meters deep dug in front of the house of the dead. The body of the deceased in crouching position was entombed in a cubicle dug on the side of the wall at the lower level. Before refilling soil in the grave, a wooden door was used to close the cubicle to protect entry of soil into the compartment in which the dead was laid. The pile of soil marking the burial was "not more than ten centimeters above the ground." The burial was fenced by wood. However, this burial tradition vanished after evangelization of the people in 1960s.

Although death is a still highly valued part of life, the grave of an individual in the past was protected from animals, ants and fire as an expression of respect for the dead. Whistling, singing, and any other feasts were prohibited for at least a year. It was also common for the Majangir to attend funerals of relatives even if those in distant lands. *Kari* was prepared for the people attending and guarding the burial. Even today, the Majangir have continued this tradition of attending funerals of a deceased from their own village and environs. Up on the death of a relative or a former neighbor living in distant lands, people travel to attend funerals and express their condolences.

Funeral of the dead was accompanied by a mourning-ceremony in which women shed tears by plunging on the ground, and men scrape their forehead with spear as an expression of their sorrow. They had a custom of sharing the sorrow with family of the deceased. In the past, neighbors and relatives of a deceased family used to express their commiserations for three days if the deceased was a man and four days if woman. The tradition has changed now as three days has become common for all. Men among the Majangir have also abandoned the practice of bleeding their forehead with a spear up on mourning for a deceased person.

People attending the funeral were served with *kari*, bread and porridge- a tradition that has continued to date. Since the burial custom has changed with the advent of Christianity, only elderly people could memorize the information contained in the tradition practiced by their predecessors.

One can not exactly tell the location of the burial areas described by elderly people of the Majangir because several areas are currently under coffee farms, settlement and site abandonment has been part of the Majang tradition. Present day funerary practice of the Majangir takes place in cemeteries. They dig rectangular holes at the floor of which they prepare a special compartment in which they place the wooden coffin consisting the deceased.

7.3. The Oromo of Jimma

Jimma is presently a city within a special zone in Oromiya Regional State and is circumscribed by Jimma zone. It is still one of the three leading coffee producing zones in Ethiopia with yearly production of 26,743 tones at the end of 2005 contributing 11.8% of the total production in Ethiopia (CSA 2005). The three largest ethnic groups inhabiting the area at the time of the report were the Oromo (87.6%), the Amhara (4.05%) and the Yäma (3.12%). The remaining 5.23% of the population comprises of all other ethnic groups in aggregate. The bulk of these inhabitants were Muslims (85.65%), Orthodox Christians (11.18%) and Protestants (2, 97%) (CSA 2010b). The present city of Jimma is situated on the site of Hirmata, the greatest market of Jimma Abba Jifar. The city served the Italians as the provincial capital. The old capital of the kingdom was at Jiren several miles from the new town (Lewis 2001).

7.3.1. Socio-Cultural Perspectives

From anthropological perspectives, the fundamental unit of Jimma society blends a "patri-potestal and patrilocal joint family''. The *qä'e* (*qa'ee)*, a homestead comprising one or two adjacent compounds, is inhabited by three generations: the senior male and his wife or wives, some or all of his sons, and unmarried daughters and some grandchildren. Servants and in the past, slaves live in the same compound or even the same houses. The Jimma Oromo generally recognize agnatic kinsmen composed of a group in relation to such groups is known as *sägni* (*sanyii*)[84]- literary seed-a term that could also contextually embody different meanings. It can be used to refer to people, nation, race, tribe, genus, kind, type and

[84]Lewis (2001:59) designates *sanyii as* 'sibs'-an appellation used by Murdock (1947:47).

relations (Foot 1913 in Lewis 2001:59). Marriage between any cousins, cross or parallel, is austerely prohibited. Indeed, if the parents of the boy and the girl can trace any common predecessors on either side, they cannot enter an agreement for a marriage between them.

Excepting such specialties of women as cotton spinning and basketry, artisan and artisanship among the Jimma Oromo is in the hand of special castes. The people belonging to these castes carry out every non-agricultural, but skilled task. The following table illustrates the names and activities of craft specializations in Jimma in general and the study area in particular as compiled from elucidations of Lewis (2001).

Table 7.1.Craft and craft specialization in Jimma.

Ser.No.	Name of crafts in *afaan* Oromo	Specialization
1	*Tumtu* (*tumtuu*)	Smiths
2	*Fuga* (*fugaa*)	Potters and handy men
3	*Faqi* (*Faaqii*)	Tanners
4	*Semmano*	Weavers
5	*Gagurtu*(*Gaagurtuu*)	Beehive makers
6	*Wata* (*waattaa*)	Hunters and foragers

Aside from the chief caste groups indicated above, there are castes of wood and horn workers, civet cat hunters and magicians. The castes are all endogamous. Their members are thought of as "ritually impure, hyenas, bearers of the evil-eye, and eaters of impure meat.'' In the past, they were not allowed to give testimony in court and were under their own head men-appointees of the king (Lewis 2001). They engage in agriculture and their homesteads are just like those of their non-partisan neighbors (*ibid*: 54).

Although quite a few artisans may build their homes close to each other, they do not live in detached places but settle scattered in the ordinary communities. Settlement pattern in Jimma, as in most of southern Ethiopia, demonstrates a remarkably analogous representation. In most cases, small homesteads are bounded by enclosures or other bushes. In terms of density, homesteads could be found either closely clustered or dispersed. In spite of extant disparities in the pattern of settlement with in different communities, such events as funeral, bereaving family during the period of mourning and raising funds for a person whose house is burnt, there is a high degree of cooperation among communities living nearby.

Members of one compound are intimately related to one another by blood ties although kin ties are not of importance to serve as the basis for settlement (Lewis 2001 and field observation among potters at Jiren near Jimma and Dalächo in Gomma district). However, it is sometimes possible to see members of a family or closer relatives living in the same village.

Figure 7.17. A hut from Gomma, Jimma zone.

The Oromo in rural parts of Jimma, like their Kafecho neighbors, live in mud plastered thatched huts, which could be circular or rectangular. A hut has a central post known as *utuba* (*utubaa*), an inner concentric wall and short verandah. The general method of construction employed is a circular wall of thin poles or withies wedged in the ground held jointly by horizontal cross-withies tied to the uprights and the whole plastered inside with mud and cow dung. Akin to the Kafa huts, the roof is thatched and supported by a central post. Calves, sometimes-even cows and other stock, sleep in a separate compartment of the hut where as people sleep in the inner room.

The huts are mostly fenced with wood or surrounded by trees. Farmers grow a variety of edible fruits, sugar cane and leafy vegetables although the most frequently noticeable plants in compounds are *ensät*, coffee trees and *jimaa* (*Catha edulis*). In most cases, a compound has a hut with wooden enclosure for cattle even if it is possible to have two huts in case of an extended family. Most of the daily activities in a household (for example, cooking, preparing and consuming coffee, known as *bunä* (*buna*) or *qahwa,* is carried out within the house where there is a special place reserved for such activities. However, in some households there are separate huts constructed to serve as kitchen.

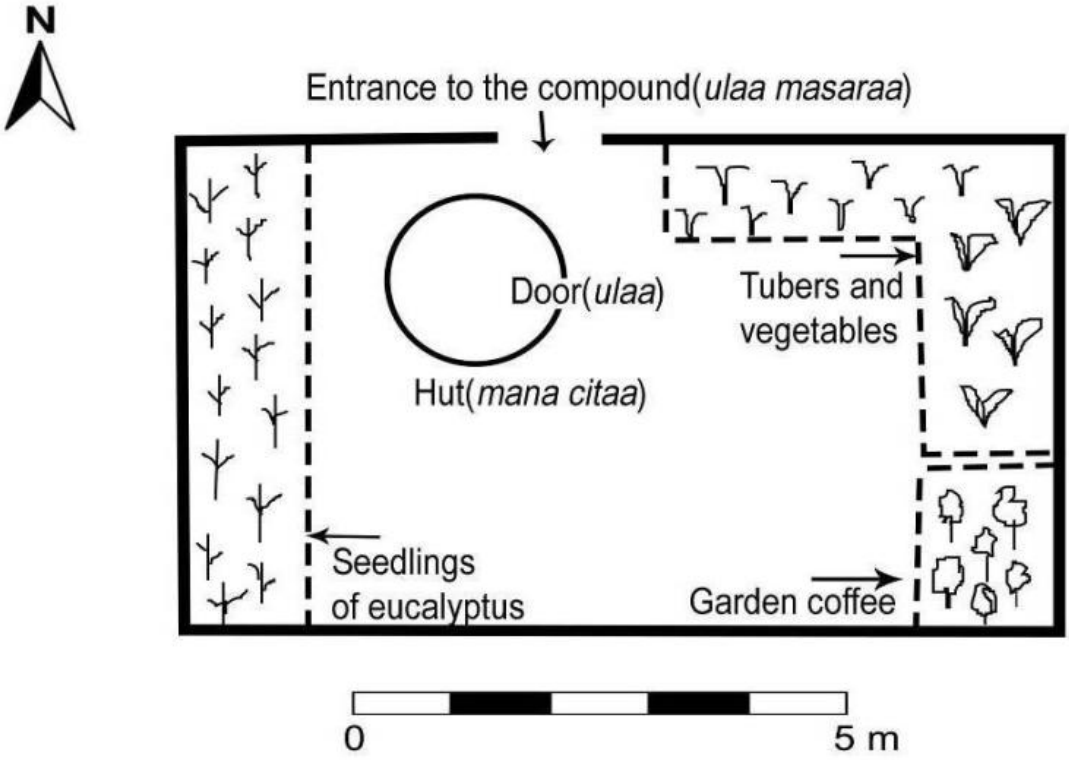


Figure 7.18a. Plan of a rectangular Oromo compound with a circular hut.

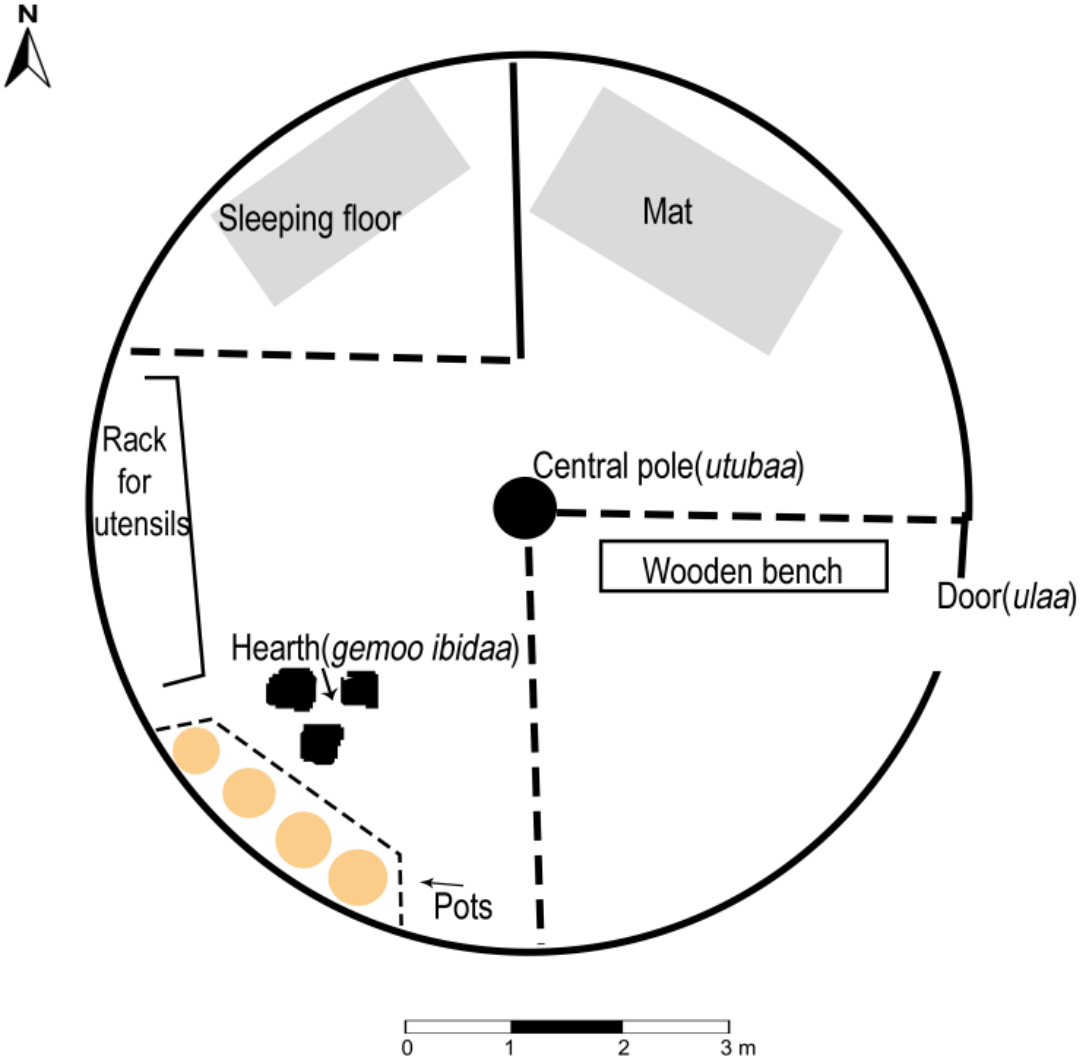


Figure 7.18b. Plan of a circular Oromo hut.

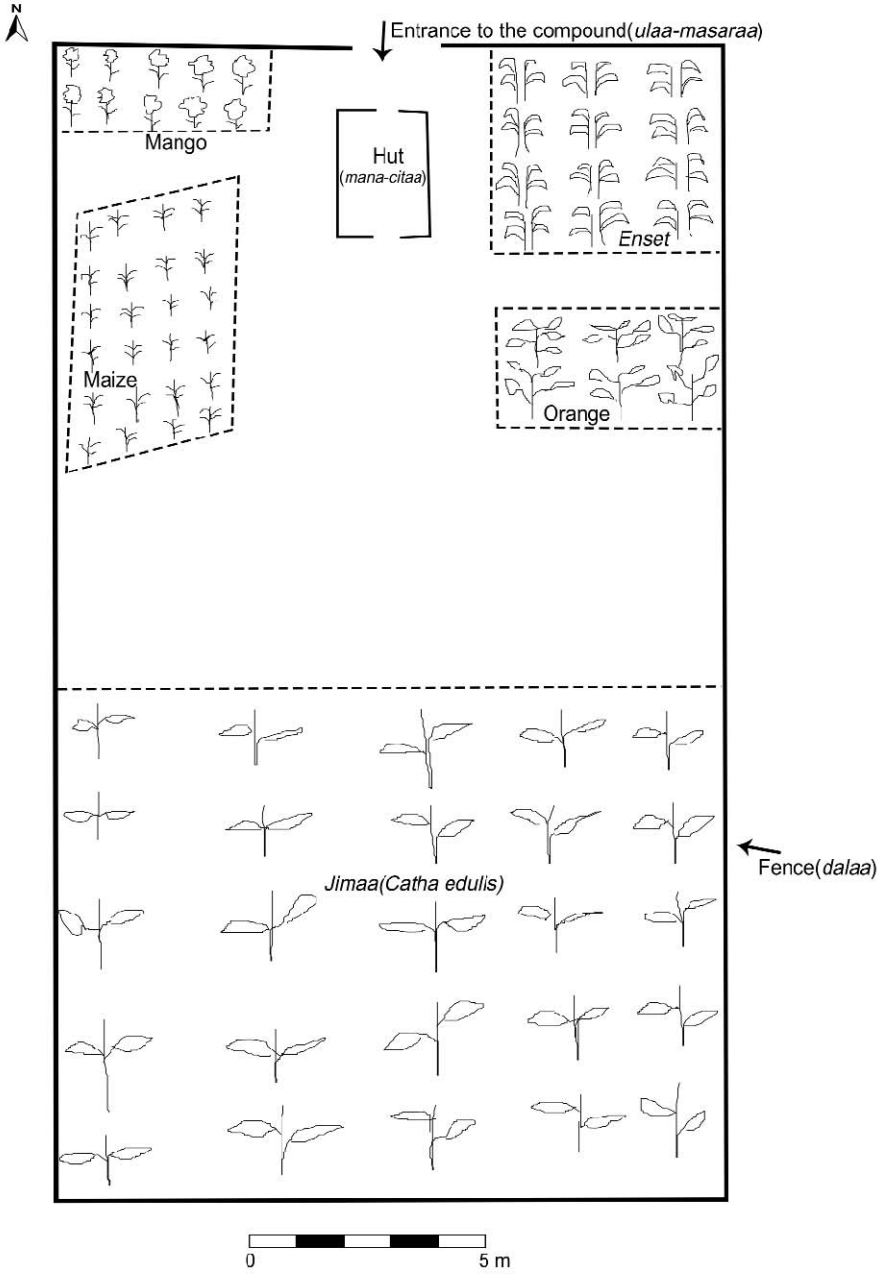


Figure 7.18c. Plan of a rectangular Oromo compound with a rectangular hut.

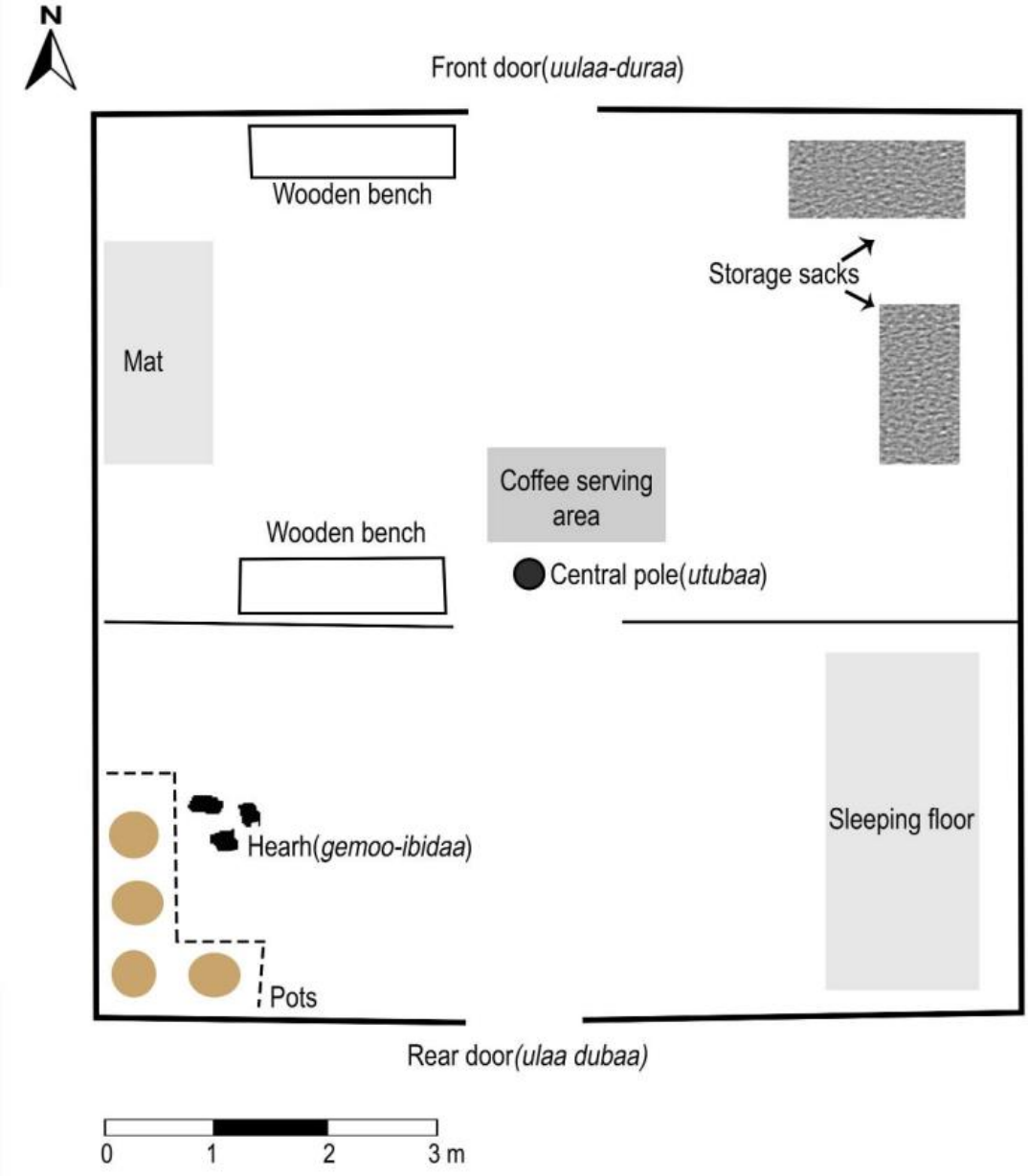


Figure 7.18d. Plan of a rectangular Oromo hut.

7.3.2. History of the Kingdom

Historical accounts present the history of five monarchies (Gera, Gumma, Gomma, Limmu-Enarea and Jimma) set up by the Oromo (Huntingford 1955; Beckingham and Huntingford 1954: lxii; Mohammed 1990). By and large, the historiography of the kingdom of Jimma suffers from dearth of historical accounts. Even then, significant information on the condition of the kingdom before the turn of the 19th century comes from annotations made by Guglielmo Massaia in 1861, and descriptions made in the accounts of travelers in the last quarter of the century. In the first half of the 20th century, Cerulli (1922) and Gruhl (1932), and later on, the works of Lewis (1965; 2001), Guluma (1980; 1984) and Tekalign (1984) substantially improved our knowledge on the history of the kingdoms of the Oromo Gibe states in broad-spectrum and Jimma in particular.

Prior to the advent of the Oromo into the present day of Jimma, the Sidama- people of Hamitic [Cushitic] stock inhabited the region, which had been divided by various political groups (Beckingham and Huntingford 1954:1-1i). Amidst them, Enarya and Garo[85] (Bosha) were well known (D'Abbadie 1890:258; Cerulli 1932:104 in Beckingham and Huntingford 1954:203; Lewis 1965, 2001). The areas between these states seem to have been occupied by other politically less organized peoples presumably ruled by elected magistrates (Beckingham and Huntingford 1954:1xi). In the process of its emergence and development, therefore, Jimma inherited either the whole portions of some part of the territories of these states and people (Abir 1968). It is probable that Jimma might perhaps be the Shimi referred to by Al 'Umari which would signify its existence as a political entity as early as mid 14th century (Beckingham and Huntingford 1954: lxi).

Oral tradition collected by Guluma (1980) in Jimma area suggests the arrival of the Mäčča[86] branch at Bisil- a spot in western Shäwa, which Tessema (1980:23) highlighted as a point of diffusion over the vast region of western and southwestern Ethiopia. The area was first known to hunting groups chasing elephants

[85] It was a kingdom whose roots could be traceable to the medieval times. Garo is situated to southeast of Enarya and its originated goes back to the 15th century (D'Abbadie 1890:258; Cerulli 1932:104 in Beckingham and Huntingford 1954:203; Lewis 1965:35).

[86] The Jimma area was occupied by Mäčča Oromo who occupied the territory west of the present day Addis Ababa from the Blue Nile on the North of Gojäb River on the south and westward to the Didesa River. They were divided into many groups having no political unity (Lewis 2001).

following which the Oromo took over the area (Hailemariam1970:31). According to this story, the Oromo occupation of the area, albeit peaceful and quite easy, did not last long as the Kafa trekked from the land far afield the Gojäb and drove the Oromo back to Bisil where the latter was compelled to stay there for five generations and proceed in the same direction. This attempt to conquer the Jimma area was spearheaded by Diggo Jano; a wise and intelligent man whose leadership led to the success of six Oromo clans who eventually occupied the area lost by the Kafa and eventually retreated beyond the Gojäb. Oral tradition has it that the period after the arrival to Jimma of the Oromo was followed by an assembly at Hulle where six[87] Oromo clans formulated *serä* (*seera*), a legal framework used in subsequent periods (Tekalign 1984:33-37).

By the beginning of the 18th century, tribes of the Limu Oromo ended the resistance of Enarya and its eastern parts were conquered by the Jimma Oromo (Abir 1965:77). There was, indeed, a stiff resistance to the Oromo expansion from Garo and Janjero [Yäma]. The former suffered defeats twice in the hands of the forces of Abba Gomol (r.1862-1875) (Massaia 1975; Tekalign 1984). The latter, though not fully subjugated by Jimma, lost a third of what it was, and ultimately overrun by the army of Menelik in 1894-an event that led to the transfer of its administration to the rulers of the Oromo Kingdom (Huntingford 1955; Lange 1982; Massaia1975; Trimingham 1952).

There are indeed two contending views regarding the first king (*moti /mootii*) of Jimma. Although tradition suggests that Horo was the youngest son and successor of Diggo (Hailemariam 1970:9; Guluma 1984:140), the title *moti* was first taken up by Abba Faro, who as a result is viewed as the founder of the Jimma monarchy (Hailemariam 1970; Tekalign 1984) and established the Diggo dynasty (Grhul 1932:304-310). No mention has been made of Abba Faro in the works of Abir (1963) and Herbert Lewis (1965, 2001). In Lewis's comprehensive study of the socio-political system of the kingdom, Abba Magal is portrayed as the leader of Diggo expansion and the coming to power of his son and successor, Abba Jifar[88] in 1830 as a watershed that marks the beginning of Jimma's statehood. Based up on oral and written

[87] These six Oromo clans, regarded as the basis in the formation of the kingdom are Jimma, are Gobo (Goboo), Horo (Horoo), Rare(Raree), Arjo (Arjoo), and Hine(Hinee). When these were welded into one under the Oromo, the country acquired the name of Jimma-Kaka (Jimmaa-Qaaqaa), "the confederacy of Jimma'' later came to be known as Jimma Abba Jifar from the name of its fourteenth king (Beckingham and Huntingford 1954).

[88] Of his remarkable achievements is the expansion of the frontiers of the kingdom up to the Gibe River- a development that facilitated Jimma's future as a center of commerce after a further decline of Limmu-Enarea (Lewis 1965; 2001).

sources on the kingdom of Jimma, Tekalign (1984:39) opines on the long and stunningly eventful reign of Abba Jiffar I (r.1830-1855) as a period in which the *moti* consolidated the unity among the Jimma clans and strengthened the power of the Diggo dynasty. This *moti* also made the first attempt to challenge the commercial value of southwest Ethiopia's neighboring kingdom of Limmu.

Islam is the prominent religion in Jimma since the days of the monarchy. There are two insidious yet contending views relating the introduction[89] of Islam into the Jimma kingdom. Trimingham (1952) considers the reign of Abba Gommol (1862-1875) as the period in which Islam got its way to the monarchy in Jimma. Contrary to this, Massaia (1972:5) indicates the presence of fanatically Muslim *motis* earlier than the former. Regardless of the difficulty to indicate the exact year for the introduction of Islam to the kingdom, Abba Jifar I is remembered as the first *moti* to embrace Islam during the early years of his reigns for political reasons (consolidating his own authority and promoting political unity via the new ideology) (see Lewis 1965; 2001; Trimingham 1952).

Abba Jifar agreed to pay tribute to emperor Menelik in 1884 and consequently rallied round the emperor in 1896-1897 in the conquest of the kingdom of Kafa because of which Menelik gave recognition to Abba Jifar's autonomy- although subject to the acceptance of the emperor's suzerainty and the payment of an annual tribute. Part of the agreement was that no churches should be built in Jimma, a vigorous but not a keen center of Islam and no grants of land could be made by the emperor (Perham 1969:305). Menelik's conquest of the Oromo of Jimma took place in 1897. In due courses, its king, Abba Jiffar II[90] submitted to conquerors peacefully (Lewis 2001; Markakis 2011). During his reign, trade, agriculture and coffee growing expanded (Lewis 2001). In return for his collaboration, he was allowed to maintain his kingship over Jimma up until his death in 1932 (Markakis 2011:91, 95).

In the days of its independent existence and autonomy, the kingdom of Jimma had developed an administrative and military system that functioned remarkably well. At the center of all politics and the top of

[89] The circumstances under which Islam got its way to the Jimma kingdom is characterized by two set of propositions. Trimingham (1952:205) considers merchants from Egyptian Sudan by way of Mätämma and Rosaries as agents of the Islamization process although this less perceptible influence is refuted based on geographical fartherness between the kingdom and areas beyond Gonder as well as disparities in school of thoughts among the *malik*- Sudanese Muslims and the *Shafti* of Gibe area. Subsequently, the influence of Sudan in Islamizing the monarchy was disparaged (see Harris 1844:65; Krapf 1860:51-53).

[90] Abba Jifar II is the 19th king and his modern name Muhammed Ibn Daud (Huntingford and Beckingham 1993:35).

civil and military hierarchy was the *moti* who ruled from the palace (*mäsära*/*masaraa*) at Jiren (Gruhl 1932:145; Huntingford 1955:55-57; Perham 1969:304-308; Tekalign 1984:48-49). Apart from officials of the upper echelon, provincial and local authorities, the kingdom of Jimma had a *qoro-qäwe* (*qoroo-qawee*), a kind of standing army with decentralized leadership. In case of general mobilization, the *qoro-qäwe* was commanded by the *moti* (Tekalign 1984:49). Akin to the kingdom of Kafa, though not identical in type, Jimma had defensive trenches (*bäro*/*baroo*)-south of Jiren to keep warring groups away from each other.

Of the cultural elements scrounged from its neighbors, include the use of a gold ring as an insignia of kingship from Kafa and the use of fine umbrellas of white silk. It was, however, the double bladed spear known as *gonfo* (*gonfoo*) which serves as the sign of king's authority when carried by messengers and ambassadors sent with men carrying royal decrees and orders (Franzoj 1885:281 in Lewis 2001:74). Travellers, who visited the kingdom in the 19th century, remarked the riches of Jimma. They attributed this magnificence to different factors but principally to the fertility of its land, and Abba Jifar's progressive economic policy. Jimma was also renowned for its quality handicrafts, agricultural productivity and efficiency of its government (Perham 1969).

Figure 7.19. The palace of Abba Jifar at Jiren, Jimma.

Figure 7.20. Wooden boxes in the palace, Jiren.

Figure 7.21. The bed of Abba Jifar in his palace at Jiren.

Another area where I conducted this ethnoarchaeological study was the district of Gomma- a memento of one of the Oromo Gibe state- the kingdom of Gomma. The written history of the kingdom is generally scanty (see Mohammed 1990:105). Oral tradition in the area associates the origin of the kingdom with Nur Hussein[91] (also called Wariko), believed to be a miracle worker from Mogadishu. It is also considered that this figure known in oral tradition has perhaps been confused with a rather popular Sheikh Hussein whose tomb is located near the Shebelle River. On the other hand, Wariko's tomb is reported to be on the bank of Dedessa River and was an object of reverence (Beckingham and Huntingford 1954). Gomma was the first of the Oromo Gibe states to convert to Islam (See Trimignham 1952:200).

The kingdom of Gomma along with Gumma was considered as the least productive from commercial point of view when compared with the remaining Oromo kingdoms in the Gibe region. Although economic conditions improved later, no signs of monarchical state developed before the last quarter of the 18th

[91] In the list of kings of Gomma given by Ceechi, Nur Hussein (Wariko) is the first king of the kingdom (Beckingham and Huntingford 1954) although the date of his reign like the remaining kings has not been indicated.

century. The people of Gomma, estimated between 15,000 and 16,000 in 1880s, vigorously engaged themselves in agriculture and produced the same crops as the other states in the region (Beckingham and Huntingford 1954). Cecchi gives a list of 11 kings with Nur Hussein or Wariko as its first king and Abba Bokka was the last to be conquered by Menelik in 1886. Before the Italian conquest in 1935, it had become the greatest coffee producer of them and much of the coffee that went through the market of Jimma came from Gomma. As late as 1900 slavery, as an institution, still flourished in the Gibe states and other parts of Oromo land. By about 1840, Gomma was reputed to be "more doomed to slavery'' than any of the other Gibe states (Huntingford 1955).

The kingdom of Jimma and Gomma represent two of the Oromo kingdoms that flourished in the Gibe region. While Jimma became a prominent monarchy with a semi-autonomous status until 1932, Gomma's obscured history ended with its conquest in the last quarter of the 19th century. In modern times, it is the kingdom of Jimma, which is the most remembered of the remaining Oromo monarchies in the Gibe region. The modern towns of Jimma and Agaro were the capital of the kingdoms of Jimma and Gomma respectively.

CHAPTER 8

THE ECONOMY OF THE PEOPLE (KAFECHO, MAJANGIR AND OROMO)

In this chapter, I recapitulate the economic activity of the people living among the three ethnic groups in the study areas, Kafecho, Majangir and Oromo of Jimma. Agriculture, particularly mixed agriculture constitutes the mainstay of the economy of the Kafecho and the Oromo in Jimma zone, where as shifting cultivation constitute the basis of the economy of the Majangir. The region is indeed one of the leading producers of *Coffea arabica*, the cultivation and consumption of which is common to the three ethnic groups under investigation. There are also a number of common edible crops grown in the region. *Enset edulis* grows well in home gardens and comprised of an important part of the staple food in the study areas and particularly in Kafa.

8.1. The Kafecho

In Kafa, agriculture and trade make up the mainstay of the economy since the kingdom period (Bekele, 2010; Huntingford 1955; Lange 1982). During the kingdom era, the land was considered the property of the king and the state. Peasants had the obligation to pay taxes in kind to the king (*tato*). They also paid taxes to the provincial heads-*gape-tato* (*gapee-taatoo*) and district heads (*gude-ukuro*). A group of people known as *tate-kisho* was assigned to collect taxes two third of which eventually went to the treasury of the *mikerecho,* the state councilors and to the provincial heads. The remaining one third was bequeathed to the *tato* and *gape-tato*, two privileged grandees who could also appropriate cattle taxes (see Bekele 2010).

Farmers in the kingdom period grew crops that are mostly grown in present day Kafa. The methods of cultivation of crops have remained largely unchanged in time. Ox-driven plow agriculture has continued as a single, yet indispensible means of cultivation in present day Kafa. Today, farmers in Kafa grow a variety of cereals and other crops as well as coffee. For the purpose of clarity, I have categorized the agricultural products of Kafa into such varieties as grains, legumes, tubers, oil crops, spices, fruits and vegetables, stimulants and *Enset edulis* (*qoco*). The list of major crops grown in Kafa as a whole and the districts of Decha, Gimbo and Adiyo in particular is presented in the following table.

Agricultural Products	Examples
Grains	barley, maize, millet, *ŧef* (*gäsho /gashoo*), and wheat
Legumes	beans, lentils and peas
Tubers	garlic,onions,potato
Oil crop/s	*Noog*
Spices	Cardamom (*ogiyo/ogiyoo)* or *ofiyo* (*ofiyoo*) and wild pepper (*turfo*/*turfoo)*
Fruits and Vegetables	Avocado, papaya, banana and other leafy vegetables
Stimulants	Coffee,*Khat* (*Catha edulis*), and tobacco
Other stable edible plant	*Enset edulis*

Table 8.1. Major agricultural products in Kafa

The examples provided are compiled based on ethnographic fieldwork and different sources on the areas (see the works of Bekele 2010 and Huntingford 1955).

Since Kafa lies within a high rainfall area with forest vegetation, it provides an ideal condition for the growth of a wide variety of crops. The cultivation of *ensät* plays a central role in the economy of the people because of its dietary and other manifold uses. It is grown around the household and is one of the staple foods (Bekele 2010; Lange 1982; Westphal 1974). Additionally, maize, sorghum, wheat, barley, *ŧef*, various beans, pea, Oromo potato, taro and Yäm are grown in the area. Farmers are situated on isolated places in the forest and its inhabitants cultivate their plants and crops in the gardens as well as on fields. In general, fields or plots are cultivated for 4 to 5 years then left fallow for one year and are planted with another crop again. No regular rotation between cereals and other crops is practiced. The fallowed land is used as pasture and slowly reverts to forest, which may be burnt to start cultivation (Westphal 1974).

Figure 8.1. Plough agriculture at Mankira, Kafa.

Among spices produced in Kafa zone, the major ones include Cardamom (o*fiyo* or o*giyo*) and wild pepper (*turfo*). The former represents an export item coming from southwest Ethiopia. Other tubers and bulbs also grow in Kafa. There were and still are occasions when some individuals give offerings (*dejo*) to the god of harvest called *Qollo* (*Qolloo*). The general activity of offering different food items and animals to this god is called *Qolle-dejo* (*Qollo-dejo*). The purpose behind this offering is to thank the god of harvest for providing good yield and for keeping away wind, disease and evil things (Bekele 2010; Lange 1982).

There is a conspicuous division of labor and specialization among men and women engaged in agriculture. Male fetch firewood and grass for animals particularly for horses and mules. They also work in farmland, fence and construct houses and produce honey as well. Female members of a family often confine at homestead and do not jointly cultivate with male, but grow vegetables such as cabbages, potato, garlic,

onions and peppers. Besides, they rare sheep and practice poultry and fetch water for household consumption. The different crops and *ensät* are cultivated in different seasons of the year. Accordingly, *ensät* in most parts of Kafa is cultivated in the months of November to December. *Tef,* locally known as *gäsho*, is another main crop cultivated between July and September. The best period for the cultivation of the crop is 13 July to 28 September covering a total of 77 days. Between late September and October, farmers remove and clear weeds from *ʈef* (Bekele 2010). Farmers make use of *dakko* (*daakko*), shelters build in an open field, constructed for the purpose of protecting crops from such animals as monkeys, apes, pigs and other crop destroyers. The shelter is approached by a ladder and is protected by leaves of *zämbaba* tree (*Phoenix reclinata*)[92] or grass. It provides shelter from the sun in winter and rain during rainy season.

Figure 8.2. *Dakko*, a shelter to watch over an agricultural land, Mankira.

Crop destroyers are hunted in groups by people living in a community (*gäfo/gafoo*). Hunting in a *gäfo* is led by *dabe-ukuro* (*daabe-ukuroo*), head of the hunters. Hunting is done by using nets fixed around bushes and suspected areas where animals could be found. Hunting days are usually Sundays and holidays. Farmers are served with food and Kafa beer called *kafi-doco* (*kaafii-docoo*), a practice I noticed during

[92] See the scientific name and details on the uses of the plant in Fichtl and Admasu (1994:232).

harvesting of coffee. Honey is collected in October and April. The district of Decha, where I conducted the ethnoarchaeological study, is one of the honey producing areas listed by Bekele (2010:21) along with Bomba(Bombaa), Gecha(Gechaa), Gudira(Gudiraa), Shalla(Shaallaa), Gombäro(Gombaroo), Malgawa (Malgawa), Modiyo(Modiyoo) and Yänga localities. Other localities include Bita (Bixaa), Gesha (Geshaa), Cama (Caamaa), Cäta (Cataa), Gimbo, Gawäta(Gaawataa), Adiyo, Saylum and Tällo.

Trade has also been playing an important role in the economy of Kafa since the days of the kingdom. Particularly, Kafa was known for its slave trade, coffee, musk and other products. There was a separate market for Muslims and Christians (Bekele 2010; Lange 1982). Thus, two markets in Bonga and Kaya-Kelo were for Christians and Muslims respectively while the Tiffa (Tiffaa) market place was meant for all Christians, Muslims and even for those merchants coming from northern Ethiopia. The Bonga market is a still significant market attended by people from different parts of Kafa and the neighboring districts including Oromiya, particularly Jimma. Markets were held under big trees and attracted people. In most places in Kafa, markets were held twice a week, Saturdays being the major market days (Bekele 2010).

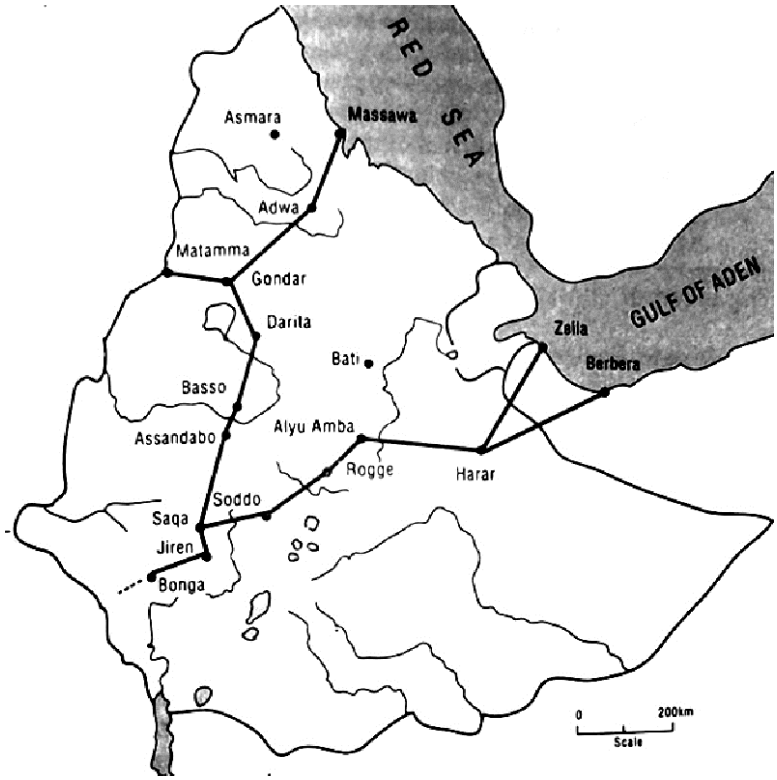


Figure 8.3. Trade routes running from Bonga (After Bahru 2002:23).

Although Kafa was a major coffee producing region, the estimated figure on the volume of export in the 1880s was merely between 50,000 and 60,000 kilograms per annum. Coffee consumption amid the people, as in today, was an institutionalized social ritual offering an opportunity to discuss local affairs before the commencement of daily chores (Pankhurst 1968:199). Presently, coffee, apart from its socio-cultural significance, plays an important role in the livelihood of the Kafecho.

Farmers in Kafa also practice beekeeping using *gändo* (*gandoo*), honey-barrels made of wooden slabs tied together with circular end pieces, which are hung in trees. A major factor behind the production of honey is the presence of favorable ecological condition in and around areas inhabited by farming communities.

Figure 8.4. *Gändo,* honey barrels hanged in the forest.

In older days, cotton was extensively cultivated and grows in the lowlands, particularly in Goba and Cäta. About 40% of the income of the kingdom was generated from trade. Lucrative items traded in the kingdom included ivory, musk, slave, coffee, spices, honey and iron-bars. Bonga, the center of the kingdom, had links to all long distance trade routes. Tax from trade was also the basis of much of the income of the king. The need to take control of trade routes running from the kingdom to the north and east, and the riches of its resources were the principal reasons for all battles waged against the kingdom (Bekele 2010).

The Kafecho still keep some of the animals raised in the past (see Huntingford 1955). These embrace cattle (*mimo/ mimoo*), sheep (*bäge/melash*), goats (*emmiso/emisoo*), horses (*mäco/macoo*), mules (*biciro/ biciiroo*), dogs (*kunano/kunaanoo*), and fowls (*bäkko).* Cattle, particularly, oxen are used as essential means of production in the agricultural system of the study area.

Figure 8.5. *Gufo* (*Gufoo*), nest for chicken.

Today hunting has a marginal economic significance unlike the past. Huntingford (1955) indicates that animals (for instance, buffaloes, lions, leopards and elephants) were hunted for their flesh, skin and horn. Hunting buffalo and elephant, apart from material benefits, is a source of prestige. Successful hunters put earrings to distinguish themselves within their community. Hunters used to grow long hair called *gofäro* (*gofaroo*). As part of the methods to protect crops from destroyers, hunters hold spears and sticks, beat drums called *gono*(*gonoo*), play musical instrument called *quokelo* (*quookeloo*) and shout in intervals in groups comprising four to five individuals to frighten animals to signify their presence.

8.2. The Majangir

Traditionally, the Majangir considered themselves as cultivators, hunters and beekeepers (see Stauder 1971). Food production has changed since Stauder's time. The single most overt change is that people are now beginning to live in permanent settlements. Hunting, which was part of the economic history of the people, has no conspicuous contribution to the subsistence of the people. Livestock was not habitually raised, but a lot of Majangir have begun small-scale livestock raising since about 1980, a transformation that can largely be attributed to permanent settlement. In addition, they have begun planting fruits and coffee trees, plants that take a number of years to produce a crop. In addition, they have begun planting fruits and coffee trees-plants that take a number of years to produce. Stauder (1968; 1971) also indicated that the Majangir traditionally lived in small groups farming for limited span of time (three to five years), and then moving to live in other places with the decline of fertility of the soil.

Unlike the mixed agriculture practiced by the Kafecho and the Oromo of Jimma, the economy of the Majangir in Shäka zone blends shifting cultivation of crops and exploitation of wild resources (gathering and consumption of plant resources). Fishing constitutes only a petite part of their economy as in the past. Stauder's (1968; 1971) description on the subsistence economy of the people indicates two starch cereals-maize and sorghum, a still vital crops that constitute the staple crops of the people.

The Majangir also exploit plant resources like taro, yams and pumpkins (*Cucurbito sp*.)(Stauder 1968; 1971). They also grow small amounts of potatoes (*Ipomoea batatas*), *ensät*, cassava and sugarcane. Such species as *t'ienaadam* (*Ruta chalepensis*) *and mirmitak* (green pepper) are grown in home gardens used to flavor coffee. Besides, vegetables (onion, garlic and cabbage) and fruits mainly banana, avocado and mango are grown by the Majangir communities living in the Goji area of the Teppi. They also make use of a wide variety of resources for multiple purposes. Some wild resources exploited by the Majangir include trees and vines used for a variety of purposes. The table indicated below presents the major wild resources used in the past and the present.

Wild resources	Remarks
Trees and vines	To make shelters, fire, basket,bee-hive,stools,rope and wooden implements
Grass	To roof shelters
Leaves	For wrapping and coverings
mirmitak- wild pepper	To spice infusion of coffee leaves(*kari*)
Kawn (*kaawn*), a tuber of the yam family (*Dioscurea sp*.)	Edible wild vegetable exploited widely in older days.
Scorched leaves and branches of wild coffee (*Coffea arabica*)	To prepare *kari*

Table 8.2. Wild resources exploited by the Majangir.

Foods frequented by the Majangir include maize and a variety of tuber plants (for example, *kächi/kachii*, *sako/saakoo, baka/baakaa* and cassava, locally known as *babure/baaburee*). In the shifting cultivation system practiced by the Majangir, clearing the land and slashing in preparation for the cultivation of maize often takes place in January and February respectively. Clearing and preparing the land is done using such agricultural implements as *horda*, a wooden digging stick with pointed ends, metal implements, digging fork (mattock) and machete (*gäjäro*). Ox-driven plough agriculture is not existent. Maize is sown in March and is harvested between June and September. Between the months of June and July, the stems of maize are cut down as a concurrent task of harvesting progresses. In July, sorghum is sown without tilling the land and once its seedlings appear, the remaining corn stem are removed between the months of August and September. The crop is ready for harvesting in December. Farmers often cut the tip part bearing sorghum leaving the stem in the farm.

Farmers use either *gäjäro* or knife in harvesting sorghum. Drying sorghum takes place on *bäro* (*baroo*), a wooden bed constructed in compounds or *palle*, a wooden bed often constructed above a fireplace. Maize and sorghum are mostly kept on *palle* to prevent damage caused by insects. Sorghum is used to prepare *budena*, the Ethiopian form of pancake (Amharic-*injära*), frequented in most parts of the country. Majang peasants in the study area claim that the income from coffee is far better than maize and sorghum. Akin to the Kafecho, the Majangir construct granaries called *gotäre* (*gotaree*) in which maize-cobs are stored.

Figure 8.6. Land under sorghum cultivation.

Figure 8.7. Post-harvest scene of Majang farm at Goji.

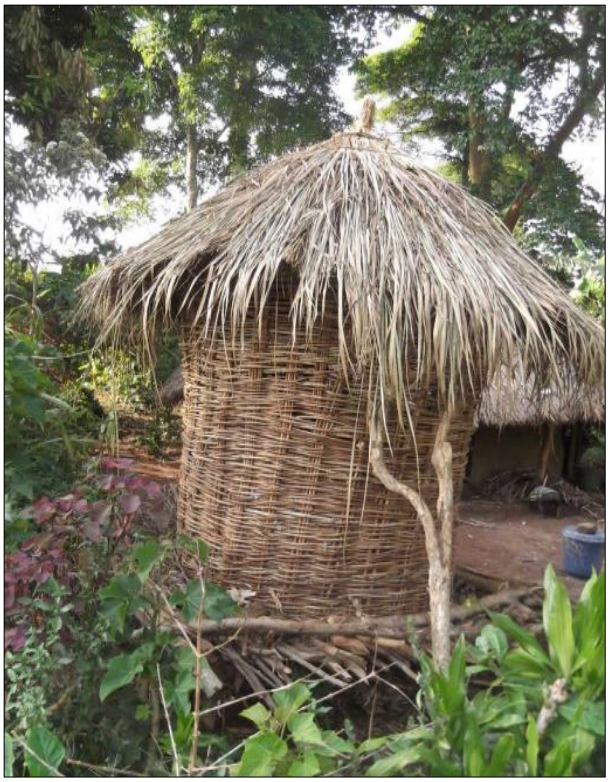


Figure 8.8. *Gotäre*, granary for storage.

The Majangir keep such domestic animals as goats (*kimit/kimiit*) and chicken (*kobil/kobiil*) and sheep (*jinkuy/jinkuuy*). A few people also keep cows for their milk. According to informants, the rearing of sheep is a post 1974 phenomenon. Even if the Majangir raise these animals, the bulk of their own food comes from farming. Consequently, animals comprised only a small share of their diet. The Majangir in the study area neither keep nor use pack animals. Hence, they gather and transport their harvest using human labor. The work is done communally by a *dado,* a group of about 6 people. Up on organizing a *dado,* the family that hosts the communal work prepares porridge or roasted cereals served with Majang traditional coffee, *kari*- an infusion of coffee leaves.

Honey is a still highly valued product among the Majangir as in Stauder's time. Beekeeping is a responsibility of men who make beehive and collect honey. November is the month to collect honey. It is locally used to make honey-wine (*ogol*) and sold in the market. Other traded items among the Majangir in the study area include coffee, red peppers, sesame, seeds, and chickens. Pottery products from the area

also constitute part of the traded items in the Teppi market. The Majangir do not possess the knowledge of metallurgy, and hence they buy iron tools like knife, ax, hoe and other industrial products from the markets in Teppi and the nearby areas.

Hunting was an important part of the economy of the Majangir in the past although it no more represents part of the economy. The elucidations by Stauder (1971) indicate that some animals (for example, elephant, buffalo and lion) were regarded as prestigious kills relatable with manhood and ritual wellbeing. There were also animals (for instance, guinea fowl and some varieties of birds, forest hogs, warthogs, ground hogs and large bush rats) hunted to scale down the rate of damage on crops. Some abundant animals (for example, bush pigs, and antelopes) were easier to shoot and trap, and were consequently hunted for their meat. Stauder's observation among the Majangir also verifies the presence of some form of deliberate hiding of games. Hunting could also be motivated by the need for important tradable items such as elephant tusks, skins of deer, antelope and leopard. The Majangir used spears for hunting even though hunters from "submerged class'' employed bows and arrows (Cerulli 1956:40-50). While hunting in the Savannah required burning tall grasses to simplify chasing and improve visibility, trapping technique were employed in the forest (Stauder 1971). Traps were used for catching elephants, which were then killed with weighted spears thrown or dropped from trees. Hunting dogs were used especially for the capture of wild pigs (Sobat-Pibor district report 1922:170 cited in Cerulli 1956). Elderly informants in Goji reverberate their experience of participating in group hunting trips in which dogs were used to catch pigs. Citing the work of Broto (1947:93-94), Cerulli put in the picture that a killer of an animal used to take the horn, skin and half the carcass. A successful hunter had two important rights in his community: the right to put on the skin of his prey as a blanket and wearing special earrings of leather and iron (see Cerulli 1956).

8.3. The Oromo of Jimma

The mainstay of the economy of the Oromo of Jimma is mixed agriculture.[93] Akin to Kafa, the plough is the chief agricultural implement in use. The climate of the area today allows the cultivation of a variety of crops in both highlands (*bäda*/*badaa*) and lowlands (*gämoji*/*gamojii*). The most important food crops grown in the area largely comprised of maize (*boqolo*/*boqoloo*) and sorghum (*mishinga*/*mishingaa*), two important cereals crucial in the subsistence economy during the time of the Jimma monarchy (see Lewis 2001;Tekalign 1984) and in recent past (see Westphal 1974:43). Other highland crops grown in Jimma embrace millet (*dagussa*/*daagussaa*), wheat (*qämädi*/*qamadii*), *tef* (*xaafii*) and barley (*gärbu/garbuu*) (see Lewis 2001; Tekalign 1984). Field crops cultivated in the area include lentil, chickpea and taro. Garden crops growing in the Jimma area include *ensä*t, yam, Oromo potato, sweet potato, several types of beans and leafy vegetables. *Ensät*, though not as critical as cereals of the region, fulfills a need during rainy season and in time of shortage of cereals (Westphal 1974).

[93] Agriculture was central in the economy of the kingdom of Jimma (Ceechi 1886:538; Darley 1935:128; Mantandon 1913:87 in Tekalign 1984: 144; Mohammed 1994).

Figure 8.9. Maize farm in Coce-Lämi environs, Gomma.

In the district of Gomma, the main crops grown for consumption entail maize, *ŧef (xaafii)* and sorghum (*mishinga /mishingaa)* and barley (*gärbu*). A large majority of household land holding is devoted to coffee (*bunä)* and consequently Gomma is the highest coffee producing district in Jimma zone (IPMS 2007). Farmers construct huts (*godo*/*godoo*) nearby maize and sorghum to watch over cultivated fields.

Figure 8.10 A *godo* nearby maize farm in the environs of Coce-Lämi, Gomma.

At Coce-Lämi, the locality where this ethnoarchaeological study was conducted, farmers grow such cereals as maize, sorghum, *ŧef (xaafii)*, legumes chiefly, bean (*baqela/baaqeelaa*) and chickpeas (*shunburaa*), and peanut. Spices grown in the area include green pepper (*bärbäre*/*barbaree*) ginger (*zingibila*) and cardamom (*kororima/kororiimaa).* Another stimulant, *khat* (*Catha edulis*) locally known as *Jimaa,*[94] also grows well in Gomma. Income from the two cash crops, coffee and *khat,* complements household needs. Farmers also grow a variety of vegetables and fruits in homegardens.

[94] The term "*jimaa"*-should not be confused with the name of the name of the Oromo kingdom of Jimma, the precursor of modern day Jimma.

Figure 8.11 *Gombisä* (*gombisä*), Oromo granary at Coce-Lämi, Gomma.

Agricultural products chiefly dry corn-pods are stored in a circular granary (*gombisä*) constructed from ravines. A typical Oromo peasant compound consist one or two such granaries covered with tall grasses or straw. The Oromo in the study area also raise cattle, sheep and chicken. Cattle often graze in open fields where they can get pasture and water from rivers and smaller streams in the area. In most cases, farmers construct a separate shelter for cattle to keep them away from insects, wild animals and cold at night.

Category of agricultural products	Examples
Grains	maize, *tef* and sorghum, finger millet
Legumes	Beans and peas
Tubers	garlic, onions, Oromo potato, sweet potato
Fruits and vegetables	Tropical and subtropical fruits (Avocado, banana, mango , orange papaya, pine-apple) and other leafy-vegetables (cabbage, salad …)
Stimulants	*Coffea arabica*(*bunna*), *Catha edulis(khat, jimaa)*
Spices	Ginger, Ethiopian cardamom and black cumin
Other stable edible plant	*Enset edulis*

Table 8.3. Summary of major agricultural products in Gomma.

Figure 8.12. Cattle at Coce-Lämi locality, Gomma.

Historically, trade was extensively practiced in Jimma whose population had a notable commercial spirit, and by the middle of the 1930s, it represented a significant portion of state revenue in the form of transit taxes and market dues (Cerulli 1932:82 in Tekalign 1984:51). In this regard, Tekalign (1984:31) remarks trade in southwestern Ethiopia, and principally slave trade as a major dynamic behind the growth of population in the latter history of the kingdom. The development of trade in the kingdom was principally dictated by political conditions in the Gibe region. Concomitant to this, travellers of the 19th century (Beke 1843:254-269; Harris 1844 Vol III: 53-54) and Massaia (1975:10) indicated the feeble position of Jimma's commercial importance in the region. This tendency changed owing to the conquests of Abba Jifar I, which facilitated the creation of trade route to the markets of Gurage and Shäwa. Alongside with this, the death of Abba Bagibo of Limmu Enarya was followed by unrest and rise of insecurity amid merchants who began to evade from travelling to the kingdom in turmoil (See Massaia 1975). By 1870s, Jimma eclipsed Limmu Enarya's commercial dominance with Hirmata becoming the largest market in the entire southwest Ethiopia. Jimma's commercial importance in the Gibe region persisted up until the 1935 though Abba Jifar's submission to Menelik had formalized the orientation of trade towards Shäwa and eastern coast (Cerulli 1922:20).

In modern time, trade also plays an important role in the livelihood of the people living in the Jimma area. Most markets are simply open fields and can be found in the outskirts of small hamlets and near the compounds of important men. There are separate sections for the sale coffee, hides, butter, salt, tobacco, clothing, cotton, firewood and root crops. Larger markets attract more traders and more people. The market at Hirmata is regarded as the greatest market in the whole of southwest Ethiopia (Lewis 2001).

The rural community in Gomma and the adjoining regions of Jimma sell their agricultural products (chiefly cereals), fruits and cash crops (*Coffea arabica* and *Catha edulis*) at weekly markets of Coce-Lämi and Agaro in Gomma, and Jimma. The markets draw quite a large number of people from rural and satellite outposts. At the small weekly market at Coce-Lamii, for example, people trade with agricultural and industrial products. Pottery products reach these markets from different parts of the vicinity including from other parts of Oromiya and Southern Nations, Nationalities and People's Region (SNNPR).

CHAPTER 9

ETHNOGRAPHIC PERSPECTIVES ON COFFEE CULTIVATION (KAFECHO, MAJANGIR AND OROMO)

> "There is an old saying that a good farm is the product of 'the man, not the land.' To a degree that remains true."
>
> (Thurston *et al.*2013)

This chapter seeks to scrutinize critically different perspectives on the cultivation of coffee. Drawing up entirely on field experience based on in-depth interviews, participant observation, and laboratory experiment, the chapter considers a range of issues relating the cultivation of coffee among three ethnic groups in southwest Ethiopia: Kafecho, Majangir and Oromo. Broadly speaking, the cultivation of the crop makes up the mainstay of the economy of the people in the region. From an agronomic point of view, the cultivation of the crop is essentially dominated by traditional farming practices based on human labor and simple agricultural implements produced by farmers themselves and other industrial products.

The cultivation of coffee in southwest Ethiopia has provided an ideal condition for the preservation of some of the indigenous trees of Ethiopia, and thus has increased a sense of concern with the environment in which coffee grows naturally and where it is cultivated in out-fields. In the forthcoming sections of this chapter, the different stages and methods deployed in the cultivation of the crop, and the array of materials involved in the process are presented. An attempt has also been made to bring the current cultivation practices of the crop to the fore although it is vital to note from the very outset that the traditional methods are beginning to coalesce quasi-modern methods introduced among coffee growing farmers. Nonetheless, coffee cultivation in this part of Ethiopia in general, and among the Kafecho, the Majangir and the Oromo communities in particular, remains fundamentally traditional while the application of modern cultivation methods is palpable in private and state owned coffee plantations established in the region. This chapter charts three central subjects: the agro-climatic settings of the crop, its cultivation methods along with the technology used in the production system and coffee processing in the post-harvesting stage. Note should, however, be made that the cultivation of the crop by farmers in the region, albeit characterized by slight differences, exhibits a high degree of similar features, which will be expounded in the subsequent parts of this chapter.

9.1. An Overview on the Agro-Ecologies of Coffee

Coffea arabica is a highland crop that grows well between 1000 and 2000 masl (Alemayehu 1992; Schmitt 2006; Wilson 1985a). But, compared to *arabica*, *robusta* grows in lower altitudes (from sea-level to 700 masl) because of which its economic value declines as one gets farther from the equator (Wilson 1985a:106). The most suitable altitudinal range favored by *Coffea arabica* is, however, between 1,500-1800 masl tolerating annual rainfall between 900 and 1300 mm per year with optimum temperature of 18 ^{o}C (Schmitt 2006). It also grows under optimal conditions between elevations of 1200 to 1700 masl, mean annual temperature ranging from 17 to 23 ^{o}C and mean annual precipitation ranging from 1500 to 2800 mm (Ayele 2011).

Coffee grows in highly variable agro-ecological conditions (i.e. climates and soils) with a wide range of altitude. In this section, I outline the general agro-ecological conditions in which the crop is cultivated. I then bring in the major environmental conditions, which allow the growth and production of the crop in southwest Ethiopia. In the process, I make use of the data that I presented in relation to the environmental setting of the region in the fourth chapter of the dissertation. The manipulation of the same data from that chapter is not an entire reiteration of the subject, but an attempt to put the data in the context of the subject under discussion. Besides results of the PH analysis on the soils, which support the cultivation of the crop, has been included. The focus in this section will be fundamentally on the conditions of temperature, rainfall and soil types and the cultivation of the crop.

9.1.1. Temperature and Rainfall

Different studies on the agro-climatic conditions of coffee (for example, Acland 1971; Coffee and Tea Authority [CTA] 1995; Nutman 1933; Robinson 1964; Thurston *et al.* 2013; Wallis 1963; Wilson 1985a) point toward the presence of a conspicuous environmental disparity amid the common coffee species consumed by humans. While areas with optimum temperature ranging between 15 ^{o}C and 24 ^{o}C are favorable for proper growth and cultivation of *C. arabica,* high temperature conditions exceeding 25 ^{o}C result in the reduction of the rate of photosynthesis. In lieu of that, an incessant exposure of coffee trees to an even higher temperature (for instance, over 30 ^{o}C) damages coffee leaves (see Wilson 1985a:101). The coffee growing regions investigated in this study have the favorable temperature indispensable for the cultivation of coffee (for details on the nature of climate and thus amount of temperature prevailing in southwest Ethiopia, refer to chapter 6 of the dissertation).

In view of the above explanations on the agro-ecological conditions of the plant, the location of the coffee growing regions covered by this ethnoarchaeological investigation is well within the altitudinal range suggested by the sources. As we saw in chapter six, the ideal altitudinal range of coffee cultivation lies between 1200-1700 masl.

	Agro-Ecological Regions(AER)		
	Western-Southwestern	Southern	Eastern
Annual Rainfall	1200-2300 mm	1200-1800 mm	900-1200 mm
Duration of rainfall	April-October	April-October	March –October
Coffee production systems	Forest, semi-forest, garden and plantation	Garden, forest and plantation	Garden[95]
Land covered by coffee (%)	58%	32%	8%
Share in the national coffee production (%)	50%	35%	8%

Table 9.1. Rainfall and coffee production systems in three agro-ecological regions of Ethiopia (prepared by the author based on descriptions made by Demel (1999) and Ayele (2011).

The region under this study falls exactly within these altitudinal ranges and is therefore perfectly suited. In tandem, this ethnoarchaeological study in the region has revealed the presence of coffee producing communities living in areas with altitudinal variation ranging between 1150 masl in Teppi and 1738 masl in Coce environs of Gomma. Nevertheless, the highest altitude standing at 2533 masl was recorded in Adiyo district of Kafa, a non coffee-growing area studied with the motive of apprehending the coffee consumption practices and the production of coffee-related pottery. Based on altitude, therefore, two major coffee growing agro-ecological zones, the *qolla* (the hot regions) and *wäyna- däga* (the temperate regions), are discernable in the study areas- where temperature conditions described in chapter 6 of the dissertation favor the cultivation of the plant.

Coffee grows naturally in understory of the rainforest of southwest Ethiopia. In such ecological conditions, Wilson (1985a:97) notes that, there has not been an incentive to develop a mechanism to reduce water loss in times of stress. Consequently, there will be continuous lose of water, the rate of which will be

[95] It is the only production system in the region (see Demel 1999).

entirely reliant on the meteorological conditions pervading in the area. It also requires good rainfall (1000 to 1500 mm) and a well draining fertile soil.

The meteorological conditions in southwest Ethiopia, principally rainfall and temperature, are conducive for the natural growth and cultivation of the crop with minimal human tending. On the other end of the spectrum, water logged conditions result in the decline of yield at a considerable scale, and even can kill trees if the same condition is prolonged (Wilson 1985a:102). However, the coffee growing areas of southwest Ethiopia obtain the optimum amount of heat and moisture required for the cultivation of the crop. Thus, based on available data and field observation, one can surmise that the prevailing climatic condition coupled with the presence of the rainforest dissected by streams and rivers in the area guarantees favorable conditions for the growth and production of the crop.

From an agro-ecological perspective, Demel (1999) notes that the bulk of coffee produced in Ethiopia comes from three agro-ecological regions: western-southwestern, southern and eastern coffee growing regions marked by altitudinal variations ranging between 900 to 2300 masl. The volume of coffee cultivated in the remaining parts of the country is rather trivial compared to the total production from these agro-ecological regions. The study areas fall within the western and southwestern agro-ecological division where 58% of the land is covered by coffee and 50% of the total coffee produced in the country comes from (see Ayele 2011; Demel 1999).

9.1.2. Coffee Soils

The type of soil in an area is an essential factor for the growth of any plant, and *Coffea arabica* is of no exception. Different sources (for instance, Acland 1971; CTA 1995; Robinson 1964) suggest various ranges of PH level of soils for *Coffea arabica*. Regardless of these variations, Wilson (1985a:104) indicates that the plant grows on soils ranging from very little acidic (PH below 4.0) to slightly alkaline (PH up to 8.0) although neither of these extremes is appropriate for an economically high output production. While acidity within the correct range is a necessity, it is not the single prerequisite. The essential nutrients for the growth of the plant must also be available at a reasonable and in appropriate proportions. PH plays an important part in maintaining soil productivity. In very acidic soil (<5.0), the availability of nutrients for uptake by the plant is limited. Of the different ranges of PH suggested for favorable growth of *coffea arabica,* two of them suggested by Robinson (1964:9) - PH 5.2 to 6.2, and Acland (1971:64)-PH 5.3 to 6.0- stand out among others. Akin to other *arabica* coffee growing regions of the world, coffee cultivated in Ethiopia likes soils that are deep red to brown red, laterite loams or clay loams of volcanic origin with high or medium fertility and with PH values ranging from 5.3 to 6.6 (see Krug and De Poerck 1968). The plant also favors acidic soils (Demel 1999), but grows well on soils with PH range between 4.37 and 6.78 (Alemayehu 1992). For the purpose of lucidity, I reiterate the fact that nitosols constitute the dominant type of soil in coffee and tea growing areas of southwestern Ethiopia such as those covered by this ethnoarchaeological research (for details on the types of soil in the region refer to chapter 6 of this dissertation). However, in the region's montane forest, coffee grows on soils with varying acidity. For example, Krug and De Poerck (1968) propose slightly acidic soils of the area as the most suitable for the growth of this delectable plant. In light of this, the PH level[96] of soil samples from the coffee growing regions covered by this study were analyzed at the laboratory of the Science Faculty of Addis Ababa University, Ethiopia.

The results hint that the soils are conducive for the cultivation of coffee though there are inter-regional even intra-site variations in the PH level of the soils sampled as indicated in table 9.2. Accordingly, the soils of the coffee growing regions of southwest Ethiopia fall between PH values of 6.10 at Qäja-Araba in Gimbo district of Kafa and 6.56 at Coce in Gomma. Thus, the PH level of the soils is within the range (5.3 to 6.6) suggested by Krug and De Poerck (1968).

[96] A PH meter, a PH- standard buffer solution (50 ml) and distilled water were used in measuring the PH level.

Study Areas	Districts	Localities selected for soil sampling	PH-level	TDS(mg/liter) Total Dissolved Solution	Electric Conductivity EC(ms/cm ^{2})
Kafa	Decha	Cäga	6.41	231	113
		Arada-Gicha	6.19	179.7	87.1
		Arada-Gicha	6.40	205	100.9
	Gimbo	Qäja-Aaba	6.10	204	100
		Kaya-Kelo	6.18	202	99.2
Teppi	Yäki	Opa	6.34	266	130.3
		Näwe	6.22	270	Error
		Meda	6.29	260	227.4
		Meda	6.32	569	Error
		Meda	6.48	231	113.4
Gomma	Coce	Mato	6.56	215	105.2
		Simbiro	6.54	272	133.4
		Cat-tära	6.44	212	104.0
		Cale-tiqa	6.50	192.2	96.7
		Coce	6.41	207	101.6

Table 9.2. PH level of soil samples from Kafa, Teppi and Gomma, southwest Ethiopia.

In the above table, Electric Conductivity (EC) measurement in soils from the study areas is expressed in millisiemens[97] per meter (ms/m). According to Grisso (2009) variation in electrical conductivity is explained by the difference in the moisture holding capacity of soil[98] particles- a principal factor that affects yield. Accordingly, studies indicate that low soil EC correlates with low yield as high soil EC relates to higher yield. Notwithstanding the credibility of the above conjecture on the relation between soil EC and yield, the noticeable variation in the measurement of EC for soil samples from the study areas cannot be exclusively taken as a factor pinpointing sizeable variations in yield from coffee farms within the same vicinity. I presume this based on Grisso's (2009:5) postulation that soils containing excessive salts from the application of high rate of manure/biosolid EC measurements may not signify electric conductivity, but the variation in the use of manure/biosolid. Given the fact that the soils from the study areas were sampled from coffee farms under garden cultivation system where the rate of humus formation is high and manuring by farmers is a rather simple undertaking, the above deduction accords with Grisso's hypothesis.

Soil conditions also interrelate with rainfall in two principal ways. First, the ability of the coffee trees to endure a long dry season without undesirable effects depends on the quality of water contained in the soil, which, in turn, is controlled by such parameters as the depth of the soil explored by coffee roots and the capacity of the soil to hold water (Wilson 1985a:100). Second, if coffee is planted on shallow soil, where the topsoil is clay, there will be less water available for coffee trees resulting in the wilting of the plants. The greater the amount by which rainfall exceeds 1500 mm, the greater will be the reduction in yield. Water logging reduces root efficiency although low light levels may have some effect by reducing photosynthesis and heavy rainfall at the beginning of the wet season, which may decrease pollination (*ibid.*). Since coffee is an evergreen plant, it is clear that it requires water from subsoil even in the dry periods of the year. Concomitant to this, different scholars note deep soils with good water holding capacity as the most suitable for the growth of the plant (see for instance, Demel 1999; Schmitt 2006). In southwestern Ethiopia, where there is a short dry season, coffee grows well in shallow clay soils of 15-20 cm deep though yield can fall owing to either an excessive precipitation or a prolonged dry season (see Alemayehu 1992). Given the setting on the agro-ecologies of coffee, I now sketch out the categories of coffee cultivation in Ethiopia.

[97] Grisso (2009:1) defines a Siemen as ''a measurement of a material's conductance.''

[98]According to Grisso (2009), sands have a low conductivity, silts have a medium conductivity, and clays have a high conductivity. Consequently, EC correlates strongly to soil particle size and texture.

9.2. Types of Coffee Cultivation in Ethiopia

Ethiopia is principally an agricultural country and coffee makes up the mainstay of the agricultural economy, as it is the main source of income for most farmers living in southwest, southern and eastern part of Ethiopia. In this section, the type of coffee cultivation methods in Ethiopia will be outlined as a prologue to the discussion on data from the study areas. The principal types of coffee production systems extant in the country have been categorized into four types: forest-coffee, semi-forest coffee, garden-coffee and plantation-coffee (see for example, Demel 1999; Demenu 2008; Kassahun 2006; Tadesse *et al.* 2001; Tadesse and Feyera 2008; Wiersum *et al.* 2007).

Coffee cultivation systems	% from the total coverage	% from the national coffee production	Yield(kg)/hectare
Forest-coffee	9%	10%	50-150
Semi-forest coffee	24%	35%	100-200
Garden-coffee	62%	35%	400-500
Plantation-coffee	5%	20%	450-570

Table 9.3. The state of coffee cultivation system in Ethiopia (compiled based on descriptions in different sources). Row I, II and IV (Demel 1999 ; Tadesse *et al*. 2001 ; Kassahun 2006 ; Wiersum *et al*. 2007) ; Row III (Tadesse *et al* 2001 ; Kassahun 2006 ; Wiersum *et al.* 2007).

The four kinds of coffee cultivation systems indicated above vary in terms of methods involved, the volume of production and the size of land on which the crop is cultivated. Differentiation of these cultivation methods of the crop is summarized in the forthcoming paragraphs.

Despite the presence of different approaches in defining forest-coffee, I rely on the widely accepted characterization of the very notion that "forest coffee grows as an understorey in natural forest within a complex ecosystem and in wild state" (Demenu 2008:83). This is a self-sown coffee system found in different parts of Ethiopia mainly in Southern Nations, Nationalities and People's Region (SNNPR) and Oromiya (Demenu 2008; Tadesse 2003). The main eco-region of the wild *Coffea arabica* is the southwestern forests, chiefly Kafa, Shäka, Bench and Maji zones in SNNPR (Tadesse 2003) and the Bale(Baalee), Illu-Abba-Bora, Jimma and Qeläm- Wälläga zones of Oromiya (Demenu 2008:83; Tadesse 2003).

Based on literature review on the subject, two broad divisions can generally be made out of the four coffee cultivation systems of Ethiopia: traditional and modern cultivation systems. Three coffee production systems, namely forest-coffee, semi-forest coffee and garden-coffee (see Demel 1999; Tadesse and Feyera 2008; Tadesse *et al*. 2001) are discernable within the traditional system, while plantation coffee comprised of the modern coffee production system. For the purpose of this dissertation, I will broadly discuss the characteristics of the former though there is an unavoidable need in explaining the later. As clearly depicted in table 9.1, all the cultivation systems classified under the traditional and modern methods are represented only in the western-southwestern Agro Ecological Region (AER) where the study areas are situated. On the other end of the spectrum, the eastern agro-ecological region is characterized by the presence of a small-scale garden- coffee cultivation system within the broader traditional crop production system. For example, under the forest-coffee cultivation system, farmers directly harvest coffee from wild populations of the understorey trees growing in the Afromontane rainforests of west and southwestern Ethiopia, whereas in the semi-forest coffee cultivation system, farmers interfere in forest-coffee through such activities as thinning of overstorey trees, slashing and enriching vacant spaces by transplanting seedlings(see Demel 1999). The later prevails in the western–southwestern AER, where as garden-coffee cultivation system is dominant in the southern and eastern AER. In garden-coffee cultivation system, farmers plant coffee seedlings close by their residence fertilizing them with organic waste and often interspersing with different crops depending on the agro-ecology. For example, *ensät* (*Enset ventricosum*) in SNNPR, grains, fruits and vegetables in Harar (Demel and Assefa 1991), and *ensät* and fruits in southwest Ethiopia are interspersed with coffee grown in gardens.

Plantation coffee is a modern type of coffee production, a system in which coffee is produced on a large-scale, and is state owned. In addition, a few individual investors have modern coffee plantations. It is in fact capital and labor intensive, and is practiced chiefly in Kafa, Teppi and Jimma and in many areas of SNNPR, and Oromiya (Illu-Aba-Bora and Qeläm-Wäläga zones and in very few areas of Arsi and Guji zones) (See Demenu 2008:383). Nonetheless, coffee cultivated from plantations accounts for a small portion of the national production (20%) as indicated in table 9.3. Coffee plantations in Ethiopia are owned by small holder coffee farmers and private investors who make use of modern methods of production (i.e the use of selected varieties, proper spacing, manuring, weeding, shade regulation and pruning) (see Demel 1999; Kassahun 2006; Tadesse *et al.* 2001; Wiersum *et al.* 2007).

Regardless of the presence of different cultivation methods, a greater majority of Ethiopian coffee farmers employ traditional cultivation practices despite the introduction of improved methods through agricultural experts known as Development Agents (DAs).This holds true for the study areas particularly of Kafecho and Oromo farmers whose cultivation practices are shored-up by technical advice from these agents. As indicated in table 9.3, 80% of coffee cultivated in Ethiopia comes from the traditional coffee cultivation system represented by forest-coffee, semi-forest coffee and garden-coffee. Plantations are found in the chief coffee growing regions, Oromiya and SNNPR where the study areas are situated.

Unlike many coffee producing countries in the world, coffee production in Ethiopia entails two unique features: (a) it is forest based (Feyera 2006; Tadesse *et al.* 2001) and (b) it is chiefly traditional comprising forest, semi-forest and garden-coffee(see Demel 1999; Tadesse and Feyera 2008). As clearly depicted in table 9.3, the volume of coffee produced traditionally by subsistence farmers account for the largest proportion of coffee produced in the country. This ethnoarchaeological study primarily focuses on the three categories dubbed as traditional coffee production systems.

9.3. Coffee Cultivation in Southwest Ethiopia

Unlike most parts of the country, southwest Ethiopia strikes me most when it comes to the way coffee is intertwined with the natural environment. It is, in fact, uncommon to see coffee trees growing amid the natural forest dissected by intermittent rivers and streams. Villages that I have passed through and lived in during the research period are all blessed with coffee trees grown or harvested with minimum care and tending by farmers of the region. During my first visit to the study areas (Kafa, Teppi and Jimma) in early January 2013, I could witness the richness of the area in coffee. Looking the abundance nature of the plant, one would, without any reasonable doubt, develops the feeling that the plant that we consume all over the world today had originally been exploited in this part of Africa, though there is no need to make that claim without unfathomable grounds. Nevertheless, the abundance of coffee in impenetrable forests, and in villages inhabited by the Kafecho, the Majangir and the Oromo, and its cultivation by farmers of the region poses a range of questions related to the origin of the plant, its cultivation methods and its values amid the communities producing the plant.

In the preceding two chapters (4 and 5) of this dissertation, I have already sketched the historical and botanical data, which pinpoint Ethiopia as the origin of coffee. One of the core questions to be addressed in

this dissertation, however, revolves around the theme of coffee cultivation systems in southwest Ethiopia, and primarily of Kafecho, Majangir and Oromo farmers in the region. Prior to the discussion on the subject, two points deserve to be mentioned. First, there is a great degree of inter-ethnic parallel in the current methods of coffee cultivation despite slight variations in the agricultural systems related to the cultivation and harvesting of the crop, and indeed in the material culture employed in the process of production. Second, traditional methods of coffee cultivation in the study areas, albeit extant in the ethnographic present have, to a negligible extent, incorporated methods observable in modern coffee farms.

9.3.1. The Kafecho

Unlike my study areas in Jimma and Teppi, Kafa is home to the four types of coffee cultivation methods known in the country: garden-coffee, semi-forest coffee, forest-coffee and plantation-coffee. The agricultural practices in the four major categories of production systems exhibit conspicuous discrepancies manifested in the degree of human involvement, the amount of labor required in the cultivation process, and the volume of yield obtained from them. In each type of cultivation methods, there is an inevitable need to care for coffee trees growing naturally or planted by humans. There are also certain noticeable overlapping activities extant in the cultivation methods.

Furthermore, there is a striking disparity in terms of the application of manure in coffee farms cultivated through the four cultivation systems. Kafecho farmers in the study areas make use of no artificial manure in garden, forest and semi-forest coffee cultivated traditionally. Even in garden-coffee where farmers persistently inspect the proper growth of coffee trees, the degree of using organic manures such as compost, animal waste and hull from coffee beans is markedly variable. Note should, however, be made here that the very fact coffee cultivation in Kafa entails the four varieties known in the country does not connote the reality that all coffee cultivators are engaged in the production of coffee via every one of the cultivation systems already specified. In the following sections of the chapter, the agronomic practices of the four sets of coffee production systems in Kafa will be presented. First, I succinctly chart out the typical attributes of each category of production highlighting such significant variables as location, intensity of labour required in the process of cultivation and variation in the amount of yield. Then, I present the details of the activities in the production of the plant thematically thereby noting existing variations and similarities in each production systems.

9.3.1.1. Forest-Coffee Cultivation System (FCS)

The mountain rainforests of Kafa are noted for the rich coffee that grows wild as a part of the natural part of the ecosystem. At Mankira in Decha district, and Qäja-Araba and Kaya-Kelo in Gimbo area, for instance, coffee trees grow naturally in the forest. In Mankira locality, there is eight hundred and twelve hectares of land covered by forest in which coffee trees grow in profusion. There are other coffee farmers organized in a similar fashion in the surroundings of Budi (Budii), Yänga (Yangaa), and Yäha-Aceca (Yahaa-Acacaa) localities of the same district. The forest-coffee at Mankira is taken care of and exploited by 502 coffee farmers organized under the Mankira Live Forest Coffee Association. There are, in fact, extant variations in terms of the farmers' share of coffee forest, ranging between sixteen and two hectares of forest-coffee. While farmers have use rights over coffee harvested from their share in the forest, they are subservient to such responsibilities as refraining from illegal use of forest resources, or allowing access to others in need of wood. They are also expected to pay a membership fee of twenty-five *birr* per year for twenty years. The destruction of such trees as *kosso* (*Hagenia abyssinica*), black wood (*ʈiqur encät - Prunus africana*), *wanza* (*Cordia africana*) and *wäyra* (*Olea europaea*) [99]is under serious interdiction by the association. Even then, if a farmer wants to use such trees from the forest, presenting a written application to the association is a requirement. Up on getting permission, a farmer could cut a tree, but on condition that he would plant five to fifteen seedlings for felling a single tree in the forest. This rule is effectively enforced and helps to protect loss of biodiversity and helps the cultivation of coffee in the forest eco-system. In this coffee production system, farmers have a minimal role in the natural growth of coffee trees. But still, a significant concern of coffee growing farmers is slashing the undergrowth to allow proper growth and avoid competition between coffee trees, and tree climbers over nutrients of soil and in fact to allow movement between the coffee trees. Farmers, therefore, commonly weed the undergrowth principally in the immediate weeks before harvesting. Pruning coffee trees and planting canopy for those coffee trees growing in the transitional zone are also important parts of the care provided by farmers. Neither compost nor fertilizer is used in the forest-coffee cultivation system of the study area.

In forest-cultivation system, new seedlings growing from fallen cherries are left where they are if they are growing in the thinner parts of the forest, or transferred to parts where there are spaces within the forest if

[99] The scientific names of these indigenous trees are taken from Fichtl and Admasu (1994:247,376,388 and 391).

they are growing in the thicker parts. Sometimes, farmers uproot self-sown seedlings in the forest and plant them at a nursery nearby residential areas or garden-coffee. These seedlings from the forest are later transferred to coffee farms under garden-cultivation system. Transferring self-sown coffee seedlings from the forest to a nursery site takes place at the butterfly (*buno-wärbabete/bunoo warbaabete*) stage a phase where two coffee leaves appear after the seed coat is cast off. An antecedent to this stage in the growth of a seedling is what Wellman (1961:156) calls "the little soldier" stage, when "seedlings resemble toy soldiers on parade, dressed in helmets." It is also sometimes known as the "beetle stage" as seedlings resemble beetles on the top of twigs stuck in the ground. A cognate term used among farmers is the *bune-yundo* (*bunoo-yundoo*)[100] stage.

Figure 9.1. Coffee seedlings at the "little-soldier" stage, Gola forest-coffee, Mankira.

Notwithstanding the presence of a considerable reputation for the organic nature of the beans harvested from forest-coffee trees, the yield obtained from this system is rather meager at least by standards of the other three production systems (refer table 9.3). At any rate, coffee beans from the forest are held in affection by Kafecho farmers for their excellent flavor. Therefore, forest-coffee is taken care of and exploited by farmers not only for the coffee beans to be consumed or commercialized, but also for the

[100] It is also known by its Amharic equivalent *qob*, which literary refers to a hat worn by men.

seedlings that grow out of fallen beans. There is, in fact, a conspicuous difference related to the degree of human involvement in the preparation of seeds and growth of seedlings and that will be addressed under the thematic discussion on the stages from selection of seeds and post harvesting activities in the cultivation of coffee.

Figure 9.2. Forest-coffee at the village of Yätita, Mankira vicinity.

9.3.1.2. Semi-Forest Coffee

Semi-forest coffee cultivation is practiced by farmers in different localities of Mankira in Decha, and Kaya-Kelo and Qäja-Araba vicinities in Gimbo. The cultivation system blends two types of coffee production methods in one. This is so because while there are coffee trees growing on their own in the natural forest, farmers plant seedlings growing from fallen beans in the buffer zones around the natural forest. In relative terms, there is a limited scale of human interference especially in such essential activities as thinning, shade regulation and slashing the undergrowth to allow proper growth and facilitate harvesting. Semi-forest

coffee yields more compared to the product obtained from forest- coffee. Farmers enrich the existing coffee plant populations then carefully trim or substitute the existing trees to optimize light and shade conditions for the coffee plants.

Figure 9.3. Semi-forest coffee from the village of Gola, Mankira.

9.3.1.3. Garden-Coffee Cultivation System

In coffee cultivation systems of southwest Ethiopia in general, and Kafa in particular, garden-coffee is grown in close propinquity to residential quarters of farmers. In most cases, they are interspersed with other crops. Under this coffee cultivation system, few coffee trees grow amid other cultivars (fruits and *ensät*). Coffee trees in such farms easily get fertilizers in the form of compost, and regular surveillance due to its location. This type of cultivation system is marked by coffee trees growing in backyards or nearby areas. Under this cultivation system, coffee trees are grown in regular intervals allowing proper growth of coffee trees and movement within the farm. Farmers in the study areas produce coffee through the three cultivation systems though they are intensively engaged in garden-coffee cultivation, chiefly because of factors related to yield. This is supported by Ayele (2011:74) whose study in the Gimbo area confirms that

productivity per unit area is higher in garden-coffee[101] than semi-forest and forest-coffee cultivation systems- a further validation to the figures indicated in table 9.3.

Figure 9.4. Garden-coffee at Qäja-Araba, Gimbo.

Seed Selection and Preparation: The cultivation of coffee involves a set of activities: preparation of seedlings, planting and caring for seedlings, and harvesting and post-harvesting processing of coffee. The study shows that each stage in the cultivation of the crop demands a varying degree of human involvement depending on the type of cultivation system. From the very outset of the discussion on the subject, it is good to note that the thematic presentation of data on the stages of coffee cultivation in Kafa, in some ways, could hold true for the Majangir and the Oromo of Jimma. The analogous nature of the specific areas along with the existing differences will be indicated for each of them, in which case the subsequent discussions will not be an entire reiteration of the description that I make here for Kafa.

[101] Famers and Development Agents in the study areas in Kafa rank garden, semi-forest and forest- coffee cultivation systems to be productive correspondingly.

The preparation of coffee seedlings under garden-coffee cultivation system demands careful selection of seeds, sowing seeds in seedbeds and caring seedlings with much attention. The practice in Kafa accords with Wellman's (1961:152) statement that "under more careful and intensive culture, the seed is selected and given much attention." Kafecho farmers living in the study areas normally acquire seedlings in two different ways: from self-sown seedlings growing in garden, semi-forest or forest-coffee, and seedlings prepared from chosen seeds obtained from mother trees - healthy and productive coffee trees growing in coffee farms under the garden cultivation system. A traditional approach is uprooting self-sown seedlings[102] growing in coffee farms under semi-forest and forest-coffee cultivation systems and planting them in the thinner parts, or leaving them where they occur if there is a reasonable space between coffee seedlings. Such self-sown seedlings are also transplanted to a nursery at the best point of growth- referred by coffee farmers as the butterfly (*buno-wärbabete*) stage i.e. when seedlings grow two leaves. Whether farmers obtain seedlings from self-sown or chosen seeds, the amount of care at the nursery stage largely remains similar, though self-sown seedlings in coffee farms under the traditional method of cultivation are transferred to a nursery after some stages of growth. Analogous to seedlings from sown seeds taken care of at a nursery, seedlings from self-sown seeds are taken care of by farmers through hand weeding and hoeing around seedlings. In the forthcoming paragraphs, I will briefly chart the seed selection and preparation of seedlings from what are called "mother trees"-a scientific[103] approach appended to farmers' traditional coffee cultivation methods in Kafa, and Jimma as we shall see in the last part of this chapter. According to farmers, a coffee tree is considered as a "mother-tree'' if it meets certain criteria: it has to be green, strong and free from any of the known coffee diseases, the quality and history of the tree in terms of yield for the last three to four years needs to be superior (see also CTA 1995:3-4). Accordingly, the tree should be productive and the coffee cherries from the tree should be red and hence, at a fully ripened stage. Green or yellow cherries are not eligible for selection. Many Kafecho farmers I spoke to declare, with

[102] Notwithstanding the pervasive nature of the practice, planting spontaneously grown seedlings is not recommended by professionals in the field as such seedlings are considered to be weak, disease infested and of less developed root system (see CTA 1995:3).

[103] The study in Kafa shows that coffee farmers have acquired the basics on the theory of the scientific approach but have largely relied on the traditional ways of cultivating the crop. It is good to draw attention to the introduction of scientific methods of coffee production among farmers, which has created quasi-modern cultivation practices with a great deal of disparity among farmers in implementing the methods tutored by Development Agents. There is also a general incongruity between theoretical and practical aspects of the scientific methods brought in the cultivation of coffee in the study area, and farmers minimally implement new methods introduced through the agents.

an almost religious conviction, the superior quality of seeds from the middle part[104] of the middle structures of the lateral branches bearing the coffee-fruits. In the process of seed selection, therefore, handpicking coffee cherries from a mother coffee tree avoids the tip and basal beans on the lateral branches. Both beans on the basal and the top (crown) parts of the lateral branches are not of desired quality. The following sketch of a coffee tree indicates the preferred parts in the process of seed selection.

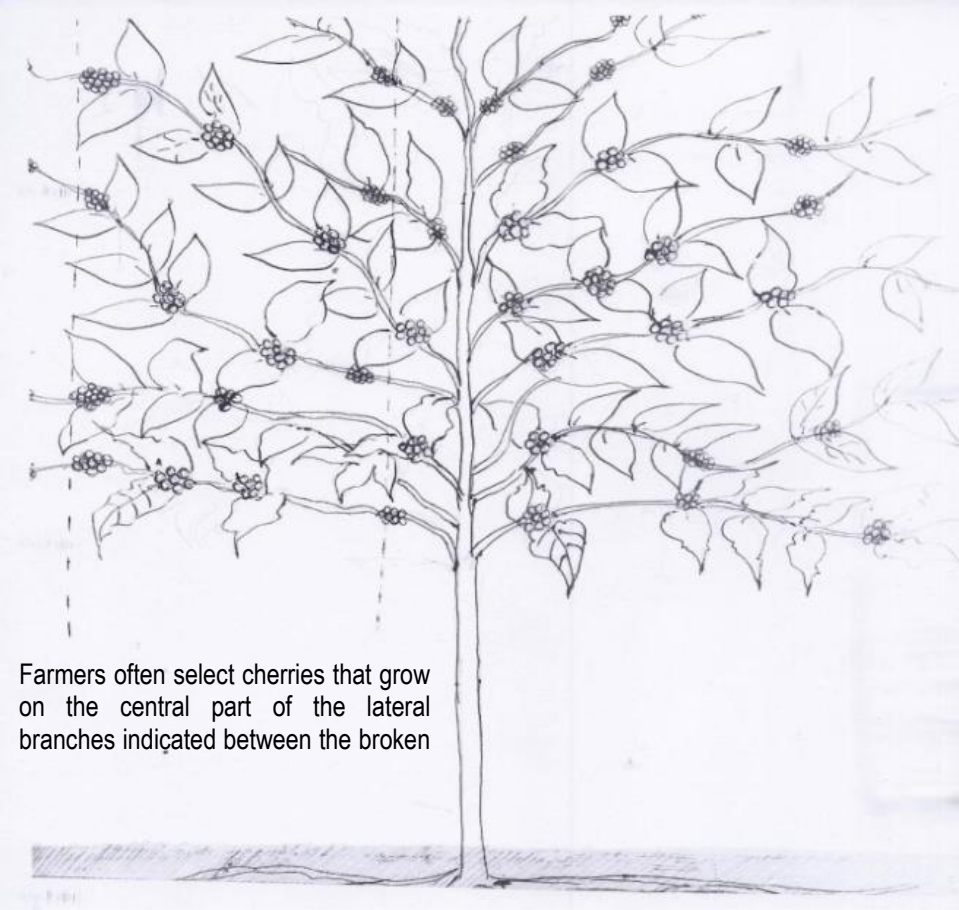


Figure 9.5. Sketch of a coffee tree showing the part from where seeds are selected.

The principal enquiry here is "how far do farmers make use of the methods in the seed selection process?" In fact, there is a striking variation among farmers in terms of applying the proper procedures. Still, the major activities involved in seed preparation are selective handpicking of red cherries during the early stages of the harvesting season (September and October), placing the cherries in a bowl containing water

[104] Wellman (1961:153) puts forth the idea that the middle selected seeds are not necessarily the best seeds, even though the tip or basal-seed may be poorer.

and keeping the cherries inside the bowl for eight to twelve hours to remove the pulp off the cherries much easier. Farmers often remove cherries floating in the bowl, as they are not qualified for selection. Then, sunken cherries are washed twice, the pulp is removed, and finally the seeds are tinted with ash, spread over a mat-like sack, or a large tray, and kept under a shadow, perhaps under a wooden bench in a living room or even under a bed. This is drying by aeration so that the seeds loose moisture. Seeds prepared in this way could be sown up until four months after drying. The amount of seeds required by farmers varies depending on the size of land to be planted by coffee seedlings. Hence, individual farmers make logical estimation of their own to determine the number of seedlings considering the importance of preparing extra seedlings to replace seedlings that may be damaged up on transporting from nursery to coffee farms, and those that could possibly die after planting. The seed selection and preparation methods specified above largely accord with the one recommended by CTA (1995).

The Nursery Stage: Preparing Seedbed, Seed Planting and Care in the Nursery

Three fundamental themes to be addressed here are the activities of coffee farmers in preparing seedbeds where seeds are sown and taken care of until they are transferred to a coffee farm under garden-coffee cultivation system. Seedbed preparation takesplace between November and December. Farmers habitually prepare seedbeds nearby residential areas, mainly in backyards to make watering much easier, nearby water bodies or near streets so that transporting seedlings up on transferring them to coffee farms becomes easier. In the process, farmers pay a great deal of attention to the site's topography. Accordingly, they avoid swampy areas and prefer areas with gentle slopes to eschew waterlogged conditions and allow exposure of seedbeds to sunlight and air.

Once a site is selected as a proper place for coffee beds, there is a need to clear the fields through weeding using a machete locally known as *gäjäro,* an iron implement used in clearing agricultural fields and slashing the undergrowth in coffee farms. The cleared fields should be repeatedly ploughed up three to four times. Actually, there are evident differences in the size of seedbeds although most farmers collectively confirm that they prepare coffee beds 10 m x 1.20 m in dimension, which could support about one thousand seedlings if seeds are sown evenly at five centimeters intervals (0.05 m x 0.05 m). Some coffee farmers also prepare seedbeds in a 5 m x 1.20 m area although the space between seeds sown on such beds remains the same. The bed could be prepared on land repeatedly tilled by ox-driven plough or prepared by human labor using a digging hoe (eye-hoe or grubbing hoe) locally known as *zabiya*- an

agricultural implement used by farmers in digging smaller plots, narrow trenches, creating new garden spaces or tilling existing ones and for moving coarse-sized materials like gravel and mulch. Once the land is tilled, it is carefully leveled and well drained. Farmers also leave a reasonable space between coffee beds at a nursery site. The space between seedbeds ranges from 0.5 m to 1.0 m although there are noticeable discrepancies among farmers in terms of applying the conventionally accepted spacing. Still, the space that farmers leave between two seedbeds would allow movement while watering and weeding seedlings that would grow on the beds.

Two principal ways can be applied in raising coffee seedlings. The first is the production of barefooted seedlings and the other is the preparation of seedlings in polytubes (CTA 1995). Since the chief concern of this ethnoarchaeological study is coffee cultivation among traditional famers, the focus here is on the preparation of bare-rooted seedlings. In Kafa, December and January are the most traditionally accepted months for sowing coffee. Upon sowing the seeds, the seed should face the ground, and the seedbed is mulched by grass or leaves of *zämbaba* tree (*Phoenix reclinata*).

Figure 9.6. Mulched seedbed, Qäja-Araba, Gimbo.

Seed bed Mulching is a strategy by farmers to retain moisture by decreasing the rate of evaporation from the seedbed and thus allowing proper growth of coffee seedlings. The grass spread over the empty seedling-bed is raised to a thickness of about three to five centimeters. Then, the bed is watered for about three days to a period of a week following which the mulch is removed.

The depth to which the seeds are sown is not more than 0.05 m. Farmers often do that either by using their index finger or a piece of stick. The holes in which the seeds are planted are covered with soil without affecting the growth of coffee seedlings. According to CTA (1995), watering seeds immediately after mulching is crucial, and this is a common practice among famers in the study areas. When the weather is dry, farmers water coffee beds and this is done in the morning (6:00-7:00 am) and evening hours of the day (6:00-7:00 pm). It takes up to forty days for coffee seedlings to emerge though that still varies depending on the amount of care given by individual farmers and the prevailing weather conditions. Once seeds are sown, the bed is re-mulched with the grass that had covered the bed at the pre-sowing stage. Farmers also regularly water the seedbed as part of the requirements for the growth of seedlings. Watering seedlings should not erode the soil on the seedling-bed, and hence calls for the use of perforated watering can. Seedlings start to emerge, grow and reach the little soldier (*bune-yundo/bunee yundoo*) stage in about forty to sixty days. This depends on the prevailing weather condition mainly moisture, type of soil and location of the area and the presence of trees to shade the seedbed. Between two to three months after sowing, the seedlings reach the butterfly (*buno-wärbabete/bunoo-warbaabeete*) stage. At this stage, hand weeding takes place every two weeks although that depends on the rate of growth of weeds.

Shade (***Dato***) Construction: Farmers in Kafa use elaborate methods of shading their seedbeds. At the little soldier or *buno-yundo* stage, a temporary shade, known as *dato* (*daatoo*), is constructed over the seedbed to provide shadow for the emerging seedlings. The shade is constructed before the mulch is removed from the seedbed in four to five weeks time after coffee seeds are sown. The shade constructed from wooden logs and bamboo over a seedling bed should allow movement, as farmers need to take care of seedlings at the nursery site. There is, however, a conspicuous variation among individual farmers in terms of the height of the temporary shade constructed over seedbeds. This is attributed to the fact that farmers habitually determine the height of the shade by estimation only to allow watering and hand weeding of seedlings. I have come across such shades in Mankira, Kaya-Kelo and Qäja-Araba where the height of the structures range between 1.30 m and 1.50 m high supported by wooden logs and roofed by long grasses or leaves of *zämbaba* tree about 0.05 m to 0.1 m thick. A temporary shade constructed over seedling bed could require up to fifteen such supporting logs in the construction though that also varies among individual farmers. Once this shade is constructed and seedlings start to appear, the mulch is removed from the bed and is put on the shade which will eventually be removed from the seedling bed two

or three months ahead of transferring seedlings to coffee farms. The purpose is to expose seedlings to the sun and adapt the external weather. In the months between April and August, seedlings are transferred to coffee farms although the onset of this activity varies amid individual coffee growers.

Figure 9.7. Coffee seedlings at a nursery, Mankira vicinity, after the shades (*dato*) have been dismantled.

Figure 9.8. A tower built to look after crops (daako) and a coffee nursery.)

Figure 9.9. Coffee seedlings under a shade (*dato*).

Figure 9.10. A Mänjo farmer hand weeding coffee seedlings at a nursery.

Care at the nursery stage includes hoeing using *kotero* – a variety of digging hoe with a sharp edged metal sheath attached to a naturally bent wooden handle. For details on the nature and application of this agricultural implement, see the forthcoming discussion on material culture relating coffee cultivation. Hoeing seedlings is carried out with the purpose of loosening the soil around seedlings. Consequently, it is

handled with maximum care to avoid destruction of roots. In the process, it is also possible to use natural fertilizer to facilitate the growth of seedlings. In fact, there is a conspicuous variation in the proximity between garden- coffee and residential areas, and hence an accompanying disparity in the degree of application of organic fertilizers including household disposals. Once seedlings are ready for transfer, farmers begin to consider the place to plant.

Figure 9.11. Hoeing seedlings with *kotero*, Mankira.

Planting Coffee Seedlings in the Field

Transferring young coffee trees from nursery to coffee fields under garden-coffee cultivation system requires some thought and skills of farmers. My field observation in Kafa shows the presence of two different settings that coffee seedlings which are taken care of at a nursery, could be planted: in old coffee farms, and in newly prepared coffee farms under garden-coffee cultivation system. In both cases, farmers prepare the land, although the methods involved in the process vary. The preparation of new coffee fields, principally in garden cultivation system necessitates site selection, preparation of holes and transferring seedlings from nursery to the newly prepared farm. In site selection, farmers take into account the conducive nature of the land (slope, soil type and drainage). In the words of the coffee farmers, "…the land

should not be waterlogged but well drained and the soil should be conducive…" These could be in areas where there are large tracts of land close to an already existing coffee farm, or in an area where no coffee trees have been planted. The choice of a site in the case of the former could easily be done as farmers have the relative advantage of understanding the site aspect topography of an area closeby cultivated coffee fields than the latter which demands careful examination of the nature of the soil and the slope.

Figure 9.12. *Togo,* marking sticks (left) and a ploughed coffee field marked with *togo* (right).

At least a year before planting coffee seedlings in garden-coffee, farmers plant such fast growing canopy tree species as acacia, *birbira* (*Miletia ferruginea*) and *wanza* (*Cordia africana*).[105] Planting canopy trees is viewed as an advantage in coffee cultivation as it shades coffee from the sun, serves as windbreak and minimizes erosion. Slashing weeds and particularly grass covering the land and repeated ploughing are among the most important components in preparing new coffee fields. Other activities at the pre-planting stage comprised of slashing, repeated tilling of the farm, weeding and covering the field with grass.

In preparing new coffee farms, the land is tilled repeatedly to soften the soil, which allows proper growth of seedlings. Under garden-coffee cultivation system, some farmers use the available spaces to plant and grow coffee seedlings to sow other grains chiefly maize or *ensät*. There are four principal activities

[105] The nomenclature and brief characterization of *birbira* can be found in Fichtl and Admasu (1994:331), and of *wanza* in Fichtl and Admasu (1994:247) and Huffnagel (1961:474).

discernible at the transplanting stage of seedlings: digging holes for seedlings, transferring seedlings from nursery to coffee fields, planting seedlings and refilling soil. Holes for seedlings are dug mostly between February and March. In determining the space between seedling holes, farmers use sticks called *togo* (*togoo*), marking the spot to be dug in a newly prepared coffee farm, or in an already existing coffee field. There is, however, some variation in the size of holes dug by farmers, which could be 0.5 m x 0.4 m, 0.6 m x 0.6 m or 0.5 m x 0.5 m in depth and breadth respectively.

Holes are dug using *hordo*[106] (*hordoo*) - an agricultural implement with a flat ax like sharp metal tool attached to a wooden handle. The characteristic features of this digging hoe are presented under the topic dealing with material culture related to the cultivation of coffee. The black soil dug from the top is kept on the right and is marked with a log. The red clay soil from the bottom is kept on the left. The soil is exposed to sunlight for a period of eight to twelve weeks. Then, the hole is refilled with the black and red soil correspondingly. After that, the soil is compacted using the log, which is also used to mark the hole for about a month[107] before planting seedlings. Most Kafecho farmers in the study areas, however, have maintained the traditional methods of estimating the proper depth based on the size of seedlings using hand or stick measurements and leaving the holes opened for a reasonable period of time ranging between a week to two before planting. There is, however, inconsistency among farmers in the amount of time elapsing between seedling hole preparation and planting seedlings. I have come across farmers who habitually dig seedling holes in April, leave them opened for a month, and refill the soils in the stated order a week before planting seedlings. However, when coffee seedlings are transferred from a nursery to coffee farm, the soil should be filled to the maximum to avoid waterlogged condition, which allows proper growth of coffee seedlings, which could otherwise turn yellow because of excess water around their root and even can die because of that. This happens not only in garden-coffee but also in semi-forest and forest-coffee cultivation system where self-sown seedlings are left where they emerge, or planted in spacious parts when they reach the butterfly (*buno-wärbabete*) stage.

[106] It is a cognate term for the Amharic *gässo*.

[107] DAs mentor farmers on the importance of exposing seedling holes to sun light for two to three months and to use a natural fertilizer 5 to 6 kg and to keep the logs inserted in the refilled soil for three months and to carefully plant seedlings thereafter. Farmers fairly make use of these orientation without paying due attention to the suggested periods and amount of organic fertilizers.

Figure 9.13. Holes dug for planting coffee seedlings close together in a row, Mankira.

While transporting seedlings pulled up from nursery sites to coffee fields, farmers avoid wilting of the seedlings by wrapping them with banana leaves. Transplanting seedlings can start after coffee seedlings at a nursery grow four leaves. Most farmers transfer seedlings from a nursery to the field when seedlings are nine months of age. Steps in planting coffee seedlings include moving the marking stick, *togo*, in the hole and pressing it down to add depth. Most farmers often plant coffee seedlings between mid May and mid June. However, some farmers plant seedlings either earlier in April or lately in July.

The season for planting coffee seedlings is correlated with the occurrence of rains and this is the preferably appropriate period. Even then, in the presence of other alternatives, for example irrigation, planting seedlings could have been possible without a serious concern for seasonal changes though that is not the case in the study areas in Kafa. If coffee seedlings wilt or dry in the field, they can be replaced by new ones.

Figure 9.14. Seedlings planted in garden-coffee system interspersed with maize, Mankira.

In coffee fields where coffee trees have been grown, farmers choose wider spaces to dig seedling holes. This is particularly true of garden-coffee cultivation system where farmers choose wider spaces between coffee trees that would allow the growth of new trees and particularly the spread of lateral branches. Indeed, there are noticeable irregularities in terms of spacing while planting seedlings among farmers in the study area though in theory the idea is to leave an interval of two meters between seedlings planted in a row (2 m x2 m) or (2.50 m x 2.50 m) as recommended by Development Agents. Yet, in an attempt to measure the spacing used in planting seedlings at Mankira, Qäja-Araba and Kaya-Kelo, I have observed the absence of regular spacing between coffee trees within and between gardens of individual farmers. In fact, the difficulty lies in the farmers' practice of planting new coffee seedlings in spaces found in coffee fields under garden-coffee cultivation system, which results in the absence of a regular pattern in the growth of trees. The spacing for planting seedlings in coffee fields provided above, thus, remains insignificant in actual terms.

Care in the Field: Farmers take care of seedlings and coffee trees in different ways. These entail weeding, slashing, hoeing around the roots of seedlings, and pruning. Although there is variation amid farmers, adding organic fertilizers is part of the care given for seedlings after planting. Most significantly, coffee growers in Kafa pay a great deal of attention to weeding seedlings.

Based on my observation in the field, two forms of weeding are known among Kafecho famers in the study areas: hand weeding of small undergrowths growing around seedlings and large coffee trees, and removing bushes, grasses, broad leaved weeds and tree climbers through slashing using machete (*gäjäro*) and wooden tools known as *hoko* and *gomo.* I will briefly explain the nature and application of the tools in the part dealing with materials in the cultivation and processing of coffee. Nonetheless, it is important to note that the difference between the two lies in their size and application though they are similar in form, as we shall see later.

Figure 9.15. *Hoko*, a wooden implement used in slashing agricultural fields, Mankira.

Figure 9.16. A Kafecho farmer holding *gomo,* Mankira.

Although hand weeding is done for most of the year depending on the occurrence of undergrowths around seedlings and amid coffee trees, farmers typically engage in hand weeding and slashing coffee trees between April and May before transferring seedlings, and between August and October respectively to clean the ground for harvesting. Weeding of emerging undergrowths and leftovers is done between the months of September and December. Weeding coffee trees and especially of seedlings is a routine, yet a demanding task that calls for continuous attention of farmers. It is done most frequently other than the typical months that require significant engagement of farmers who usually leave the slashed or weeded undergrowth in spaces between coffee trees, which eventually turns, into organic manure.

Farmers also take care of seedlings planted in the field by hoeing around the root using *kotero*, and care is given in the process to avoid damage of the roots and stem of seedlings. Hoeing coffee seedlings planted in farms allows proper growth as it allows free flow of water into the root system of coffee during the rainy seasons.

Figure 9.17. Slashing garden-coffee, Mankira.

Some coffee farmers in Kafa fertilize coffee trees under garden cultivation system using animal manure and organic waste from households though there is a marked variation in the application. Particularly, this is done in parts of the field where new coffee seedlings are planted. To sustain the fertility of coffee farms, DAs advise farmers to grow leguminous plants such (for example, beans and chickpeas) because they fix nitrogen. From my observation in the field, however, slashed weeds that dry and decay in coffee fields are used as organic fertilizers as farmers spread the decomposed parts of the weeds and humus formed from fallen leaves around coffee trees.

When a grown coffee tree declines in productivity because of its age,[108] farmers resort to pruning. Farmers tell with certainty that there is an inverse relationship between age of coffee trees and yield as productivity declines with an increase in age. Pruning is often done in the months between mid December to the end of January, and sometimes in February. When a coffee tree is pruned, the main stem is cut with a saw in a slanting manner with an inclination of about 45^{o} so that the pruned part is protected from direct exposure to sunlight both at sundown and at sunset in the east and west. It should not also get overhead sun and need to avoid waterlogged conditions at the tip surface of the pruned stem since these conditions result in decaying and impinges on regeneration. While pruning a coffee tree, farmers often leave a minimum of 0.3 to 0.4 m high stem above the ground. Since there is a need to avoid cracking of coffee trees, pruning is done by two to three people. A pruned stem of a coffee tree regenerates in about three months with lateral branches shooting from the pruned stem.

Figure 9.18. Shoots emerging from a pruned coffee tree at Kaya-Kelo, Gimbo.

[108] According to informants, a coffee tree is said to be old when it reaches the age of eighty years. Nonetheless, there are varying views on that though the purpose in pruning old trees is renewing to get better yields.

Harvesting Coffee

Typically, at the end of the third year some of the young coffee trees start to bear coffee beans. The first yield, often known by farmers as *buno-bungo* (*bunoo-bungoo*) is not that much in volume though it is collected by farmers with a sense of optimism since there is considerable work without harvest during the first two years. Under normal conditions, yield from newly planted coffee trees increases progressively. For instance, most of the new coffee trees bear fruits in the fourth year resulting in better yields. In the eyes of coffee farmers, therefore, the volume of production at this stage is significant compared to the first yield though it is not still regarded as a full-harvest. Consequently, the cultivation of coffee is rather a laborious and an enduring task compared to other cereals grown in the area. Full production from newly planted coffee trees is harvested on the fifth year, when farmers start collecting coffee cherries from lateral branches of nearly all newly planted coffee trees.

Agricultural activities in Kafa follow the pattern of weather during the year. In view of that, farmers in the study area tell that the beginning of harvesting coffee is dictated by the period of flowering of coffee trees and ripening of coffee cherries. Nevertheless, the most commonly recognized periods for harvesting in the study areas is between the months of September and December. It is not only a harvesting season but also time for preparing coffee seeds and hence laborious for farmers. During the two harvesting years of my study among the Kafecho, harvesting coffee began in mid October and early November. In my study area, most farmers begin harvesting cherries at the height of ripening for fear of theft, another factor that necessitates early harvesting. The amount of time required to harvest coffee beans varies among farmers, and this largely depends on the size of land owned by individual farmers.

The process of harvesting involves such activities as leaning the branches and picking the coffee cherries. Handpicking is done carefully to avoid breakage of branches. Sometimes, climbing the coffee trees is mandatory when coffee beans are found on the lateral branches difficult to be accessed. In such cases, a farmer climbs a coffee tree, picks the coffee cherries reddish brown in color and puts them in a *kofo* (*kofoo*), a term used to refer to a basket made from a variety of tree climber called *pio* (*phioo*).[109] It is woven into baskets used as a vessel to carry coffee cherries during harvesting season though it has other

[109] *Pio* is also used in the construction of houses as a rope to tie (fix) wooden materials of the wall and structures of a thatched roof. It is also used in making griddle-covering plate, which in fact is also made of other plants like bamboo.

secondary uses in some households. Note should, however, be made that *kofo* is primarily made and used for collecting coffee cherries.

Figure 9.19. *Kofo* from Mankira.

Harvesting among coffee producing Kafecho farmers living in the study areas is principally an activity carried out by family members. Accordingly, children above the age of ten, young, male and female, and adults as well as elderly are involved at different stages of the cultivation of the crop. Ripen red coffee cherries are collected by selective handpicking method after the ground is cleared and a piece of sack or mats known as *sälen* is spread on the ground. Parts of the coffee tree not easily reached are accessed by climbing following which cherries are handpicked. The cherries collected during harvesting are kept in *kofo*, hand woven baskets known as *zämbil* and sacks. I will briefly explain these traditional products (*kofo*, *sälen* and *zämbil*) in the section dealing with material culture involved in cultivation and processing of the crop.

Figure 9.20. Harvested coffee cherries in *zämbil,* Kaya-Kelo.

Harvested coffee bean (*buno*) is then transported by either human labor or loaded on pack animals, chiefly mules and horses, although this depends on the volume of collected beans and the distance between coffee fields and residential areas. Thus, human labor is the most common form of transporting coffee cherries, as most coffee is cultivated in gardens close by residential areas. Once the cherries reach the compound of a coffee farmer, they are ready for drying. Collecting fallen coffee beans, locally known as *buno/ bune-buko* (*bunoo-bukoo*), and leftovers hanging on the lateral branches of coffee trees is done by children and women for consumption at the household level. They are collected long after harvesting the wet beans in all coffee fields under the traditional cultivation systems. It is a laborious and lengthy task done by handpicking fallen dry cherries and continues in the later part of the harvesting season even extending to January.

Figure 9.21. Women collecting *buno-buko* at Gola forest- coffee, Mankira.

There is also a conspicuous variation in terms of the amount of yield obtained among farmers cultivating coffee. This is attributed to two major factors: the size of the coffee farm and the attention given to the crop at different stages of cultivation although the yield obtained annually could fluctuate depending on the prevailing weather condition and the presence or absence of coffee disease. Coffee yields can also drop due to the destruction of coffee trees by falling trees and the consumption of coffee cherries by arboreal like baboons and monkeys. I have come across farmers who partly put the blame on such animals, whose survival depends on forest resources. On the other end of the spectrum, these animals are agents of propagation, as they eat the cherries and defecate the seeds, which will grow in the forest. This situation in the study areas, in some way, fits well into Wellman's (1961: 325) description of the occasional destruction of coffee fruits by African monkeys and birds.

According to coffee farmers, yields also drop off due to the age of coffee trees and of course coffee disease. Many of the farmers I interviewed at Mankira, Qäja-Araba and Kaya-Kelo speak of *kolo* (*koloo*) or *kolero* (*koleeroo*), a coffee disease known as "cholera" which dries the branches of coffee trees and shatters the beans. This is Coffee Berry Disease (CBD) - the major coffee disease affecting production of

the crop in the coffee growing regions investigated ethnoarchaeologically. Coffee trees infected by *Colletotrichum coffeanum*- a fungal pathogen- have brown stain pulp stucked to the bean making wet processing a complex task. Problems comparable to this could occur when ripe berries are attacked by other fungi. The resistance of green coffee declines as a coffee tree is under physiological stress, and immature fruits can become light or even empty due to infection by these fungi (see Waller 1985:219). Eventually, reduction in quality and quantity of coffee harvested from the farm is unavoidable. However, most farmers declare that a hectare of land can yield between five to six quintals of unprocessed coffee. The amount of yield in the farmers' land however varies depending on the degree of care given to coffee trees and the presence or absence of good weather condition and coffee disease.

Drying and Processing Coffee Cherries: The Pre-Consumption Scenario

In the months when harvesting coffee progress in Kafa, it is common to see compounds with coffee drying-racks (beds) on which wet cherries are spread to dry under the sun. Part of the harvest, especially fully ripe red cherries are sold to individual merchants who would then sell it to coffee processing plants after which processed coffee enters local and international market. The remaining beans are dried in the farmers' compounds and would later be sold in the market or consumed at household level. The drying of coffee is a step in coffee processing required to prepare coffee beans for further processing at the pre-consumption stage.

In the immediate weeks before the onset of collection, farmers prepare raised drying beds from wood and/bamboo in their compounds habitually in front of a residential hut. Drying cherries in Kafa is done using raised coffee drying-racks (beds) and on mats spread over clean floors. Both approaches, however, fall under what commonly known as sun drying method (see Simayehu *et al.* 2000; Thurston *et al.* 2013). Broadly speaking, farmers make use of two types of coffee drying beds, *qombe-shibo* (*qombee-shiboo*) and *bune-qeno* (*bunoo-qenoo*) that are used to dry cherries. While *qombe-shibo* is made of a wooden-rack on which a wire net is fixed, *bune-qeno* is a traditional mat-like material woven from the tree climbing plant known as *pio.* Sometimes, plastic or canvas mats are spread over the wooden-beds in lieu of the wire net.

Figure 9.22. *Qombe-Shibo* constructed nearby a living hut, Mankira.

Figure 9.23. Drying wet coffee cherries on *qombe-shibo* at Kaya-Kelo (left), and sun drying wet cherries on wooden coffee drying-beds overlain by canvas, Mankira (right).

Farmers dry coffee cherries collected from the ground separately and store them for consumption at household level. Collecting coffee cherries from the ground is done after the end of harvesting the main yield by handpicking. Sun drying coffee beans collected from the ground (*buno-buko*) and wet cherries, collected from coffee fields in the traditional cultivation system, can be done without using a coffee-drying bed.

Two points should be clear about sun drying on the ground: (a) wet cherries are dried by spreading them on mats laid over the ground and (b) coffee from the ground (*buno-buko*) is often mixed with wet dirt and thus, needs to be dried on a swept ground closeby a residential area. Sun drying wet cherries on the ground is done by coffee growers who do not have *qombe-shibo* in their compound or by those who have the coffee drying bed, but need more space for drying. On the other hand, *buno-buko* is dried by spreading cherries on the cleared part of a compound. The amount of *buno-buko* dried in this way is so small that it is done either in the late part of the harvesting season or in the immediate weeks after harvesting. *Buno-buko* dried in this way is chiefly used for household consumption.

Figure 9.24. Drying *buno-buko* at Mankira.

Sun drying plumates the moisture content of wet cherries within few days after the beginning of the process and avoids bacterial reproduction. The number of days in which cherries dry vary depending on the prevailing weather condition. Data from Mankira, Kaya-Kelo and Qäja-Araba vicinities in the districts of Decha and Gimbo indicate that drying coffee cherries takes a period ranging between two to three weeks. Women use wooden racks (*bune-shurko/bunee-shurkoo)*[110] or their own hands to shove the wet cherries to dry them evenly. After the sundown, the cherries are kept in sacks and are stored in *godäme-qeto* (*godamee-qeeto*), thatched- roofed living huts. Once coffee dries to the expected level, it is stored in sacks in one side of *godäme-qeto*. Part of the cultivated coffee is consumed at home while a large portion is sold in local markets within the immediate vicinities of Mankira, Kaya-Kelo and Qäja-Araba. I will briefly turn to this subject while discussing the economic significance of the crop in the next chapter.

Data gathered from Mankira, Kaya-Kelo and Qäja-Araba localities in Decha and Gimbo districts of Kafa also show that the cultivation of coffee is characterized by such seasonal agricultural activities as the choice of the site for planting seedlings, selection and preparation of seeds for seedlings and care given to coffee seedlings and canopy trees at various stages of their growth.

[110] The use of *bune-shurko* is a rarity among farmers.

Material Culture Related to the Cultivation and Drying Stage of Coffee

The rich diversity of agricultural tools of Africa are generally known from ethnographic and linguistic studies rather than archaeological excavation (Blench and Dedo 2006). The array of tools used in the production and processing of coffee in ethnographic context includes those made by artisans, coffee growing farmers themselves and industrial products. These set of tools are used at the various stages of production and drying of the crop. For the purpose of simplicity, I have categorized the materials into two groups based on their function in the production of the crop. Group I: materials used in the process of cultivation and Group II: materials deployed in the course of harvesting and drying cherries. The following paragraphs present the physical description and application of implements used in the cultivation of coffee.

Figure. 9.25. Machete (*gäjäro*).

In clearing fields, slashing and weeding the undergrowth two other wooden implements, *gomo* and *hoko*, are used alongside with machete. *Hoko and gomo* are made by farmers themselves who choose naturally bentwood of a right height and thickness. Both are employed to drag weeds growing in coffee fields or bushes in agricultural fields while slashing with a machete. The difference between the two lies in their size and the number of people involved in the action. *Hoko* is a rather short implement used by one man who drags the weeds and clears them with a machete simultaneously. *Gomo* is bigger in size and hence it is held by one man to drag the weeds while the other person does the slashing using machete (*gäjäro*). Both implements are also used in other agricultural practices as in preparing agricultural fields especially in clearing weeds and leveling fields for such crops as *ensät,* banana, avocado and mango.

Figure 9.26. Slashing using machete (*gäjäro)* at Mankira. Notice the use of *hoko* (left) and *gomo* (right).

Group I also comprised of two important digging implements known as *hordo*[111](*gässo*) and *kotero* frequently used by Kafecho farmers in the cultivation of coffee. *Hordo* (*gässo*) is an ax-like metal piece attached to a wooden shaft. It is held with both hands in a standing position and is employed in digging holes to plant coffee seedlings and canopy for coffee trees.

Figure 9.27. A sharp edged metal sheath socketed to a wooden handle (top) to make up a digging stick known as *hordo* (*gässo)* -bottom.

[111] The term *hordo* is used to two distinct types of digging sticks: one with a metal sheath socketed to a wooden handle and commonly found in coffee growing regions studied in Kafa, and a second type, is a wholly wooden digging stick used in highland Kafa. The former is used to work with solid and grassy fields where as the later is employed on loose soils.

The wooden handle of the digging stick (*hordo* shown above in figure 9.27) is 1.40 m long and has a thickness of 0.2 m at the top, 0.16 m in the middle and 0.12 m at the lower part where the metal sheath is socketed into the wooden handle. The metal tip sheath shown left in figure 9.25 is 0.34 m in length and 7 mm at its thickest. The hole through which the wooden shaft is inserted penetrates the metal sheath for about 0.19 m. It is used to excavate blocks of turf with its sharp-edged sleeve. The tool is customarily used with two hands. The operator lifts it about waist-high and thrusts it down into the earth, then levers the tool turning the soil out. It is an efficient implement in digging holes for coffee seedlings and of course, in preparing postholes during construction.

Another typical characteristic type of African hoe, explicated by Blench and Dedo (2006), is the socketed hoe found almost throughout the continent. The blade is folded into a tube usually fitted into a naturally bent handle. Accordingly, socketed hoes use more iron than any other types but they are probably more durable in use. Axes with iron blades occur almost throughout the continent. They have multiple purposes and in many societies they are used as much for warfare as for cutting wood. The *kotero* of Kafa is a classic example of socketed hoe used in hoeing the surroundings of seedlings at a nursery or in coffee gardens. It is also used for the same purpose in the cultivation of other crops. Both *hordo* (*gässo*) and *kotero* are socketed and stable tools used by farmers with a relative ease compared to other digging materials such as industrial hoes. In *kotero,* the ax-like metal blade is fitted to a naturally bent wooden handle while in *hordo* (*gässo*) a straight stick is fixed into the metallic socketed hoe. Farmers often buy the metal blade folded into a tube from Kafa smiths (*qemo*) who sell these products in weekly markets in Bonga.

Figure 9.28. *Kotero*, a socketed agricultural implement from Mankira, Kafa.

Group II: The second class of implements is used during harvesting and drying stages of coffee. Two traditionally woven baskets known as *kofo* and *zämbil* are used to collect and carry coffee cherries. Men take the responsibility of making *kofo*, while both male and female can wove *zämbil.* There is also a difference in terms of the raw material employed in production of the baskets. While a tree climbing plant, known locally as *pio,* is used to make *kofo,* reeds of *zämbaba* tree are employed in making *zämbil* and mats known as *sälen* (*saleen*). Even though the use of hand-woven traditional drying mats made of *pio,* known as *bune-qeno*, is a rarity, few farmers in Mankira still make use of it to dry coffee cherries. This material, deemed to be widely used in older times, is presently beginning to give way to other industrial products like canvas and plastic mats, which are spread on the ground or overlain on wooden coffee drying-racks constructed by farmers.

Figure 9.29. A *bune-qeno* from Mankira.

9.3.2. The Majangir

Among the Majangir living in the environs of Teppi, the cultivation of the coffee is principally of garden cultivation system. Akin to Kafa, the Teppi area lies in one of the chief ecological regions of wild *coffea arabica* in southwest Ethiopia (see Demenu 2008; Denich *et al*. 2003; Paulos and Demel 2000). There are also privately owned coffee plantations in the outskirts of the town. The focus, here, is presenting data on the stages involved in the cultivation of the crop and characterizing the associated material culture principally agricultural implements and other materials used in the process of harvesting and drying cherries. The blueprint of the presentation on the subject differs from that of Kafa since the general divisions within the coffee cultivation systems in Ethiopia and the characteristic features of each have been explained in the preceding sections of this chapter. The Majangir in the study area literary live in "coffee forests." It is consequently common to see homesteads surrounded by coffee trees most of which are part of the garden-coffee cultivation system even though many of the farmers also cultivate the crop in coffee farms located away from residential areas. Coffee grows best in all environments of Majang land excepting sandy soils as in Kafa and Jimma.

9.3.2.1. Acquisition of Coffee Seedlings and Care at the Nursery

There is an evident disparity in terms of the way the Majangir used to acquire seedlings in the past and the present. Informants remember that in earlier days coffee was exploited from wild coffee that grew in the forest. Accordingly, the entire village of Goji was once covered by forest in which coffee thrived in abundance and was exploited for its leaves to prepare *kari.* The Majangir realized the economic value of coffee beans much later than one would expect, and the beginning of the consumption of coffee beans among the people, as we shall see in chapter ten, is a recent development though its consumption remains to be of marginal importance. The subsequent paragraphs of this section portray the methods involved in seedling acquisition, and care to the seedlings at nursery sites.

Akin to the Kafecho and the Oromo in the study areas, two ways of acquiring seedlings are discernable among the Majangir: planting seeds on coffee beds and transplanting seedlings growing from self-sown seeds in coffee farms under cultivation. Unlike the Kafecho and the Oromo of Jimma, however, the preparation of coffee seedlings from coffee beans among the Majangir follows a rather different trajectory.

The overall process begins by selecting land to prepare seedbeds to grow seedlings. In selecting a site, the Majangir favor areas where water could easily be obtained or within their own compounds which would make the supervision of the growth of seeds easier as farmers could water and weed the seedlings with relative ease. Once a site is selected, farmers clear the land using cutlass (*jame*), ploughing the land three to four times using manual labour employing digging-hoe (eye-hoe or grubbing hoe), *zabia*. Clearing and ploughing takes place in the months of November and December during which farmers prepare seedbeds, cover them with grasses or thin leaves and finally water them. What follows is the preparation of seeds, which involves sorting and separating the seeds from the waste. These routine tasks are done by both men and women. Planting coffee seeds on seedbeds takesplace in December during which only clean seeds are planted at an interval of about 0.1m x0.1m. After planting seeds, the bed is mulched, and seedlings begin to appear between thirty to forty-five days. In January, the mulch is removed from seedbed and farmers construct a temporary shade. Care for seedlings includes hoeing seedlings, which begins in the month of February. Since weeds are not good for the growth of seedlings, farmers hand weed seedlings on a regular basis. In mid May when these seedlings are ready to be planted in homegardens or in coffee farms located away from residential areas, farmers uproot them and wrap their roots to avoid wilting and transplant them in holes dug for this purpose.

Figure 9.30. A seedling-bed in a backyard at Goji.

Analogous to their predecessors, modern day Majang inhabitants of Goji still make use of self-sown ("wild") coffee seedlings growing from fallen cherries in coffee farms under the garden-coffee cultivation system. These seedlings are left either where they grow if the area is spacious, or transplanted to coffee farms getting the proper care at a nursery prepared either close to the coffee farm or in backyards. Farmers carefully pull up self-sown coffee seedlings from coffee farms and take them to residential areas after wrapping their roots with leaves- part of the care to avoid wilting. These seedlings are later planted directly in the home gardens or coffee farms. Planting seedlings after a rainy day is considered as the best time that ensures growth. Typically, self-sown coffee seeds begin growing in coffee farms in June and July. Consequently, preparing seedling-beds for such seedlings progresses in the months of July and August. Coffee seedlings can be taken care of at household level by planting them on seedbeds nearby houses and particularly, under the shade of a shelter, where water from a thatched roof can provide moisture and protection from the sun. Seedlings are often planted on these beds in September. In this traditional coffee cultivation system, there is no actual measurement of the dimension of the seedling-beds.

Figure 9.31. A young Majang farmer holding a self-sown coffee seedling from his farm, Goji.

The coffee seedlings planted on seedling beds are of two types: those at the butterfly (*dimbilu/diimbiiluu*) stage -two-leaved coffee seedlings and seedlings with more than two leaves. Since the two types of seedlings are at a different stage of growth, they are planted on separate seedling- beds. The gap between seedling-beds should allow movement for farmers particularly to help weeding. Seedlings are planted on coffee beds between May and July. The planting of coffee seedlings on seedling-beds coincides with the rainy season -an important factor that allows avoiding such laborious tasks as watering, constructing shades (*pape/paape*). Indeed, home gardens should have shade for the proper growth of the seedlings. My observation in the field shows coffee growing farmers prepare the seedbed either near coffee trees or fruit bearing plants like avocado or amid banana trees because of which constructing a shade becomes unrealistic. At the nursery stage, hand weeding of the undergrowth, digging the surroundings of seedlings and clearing weeds surrounding coffee beds are essential components of the care given to coffee. Above all, weeding requires continuous engagement if seedlings are to grow well. A seedling takes between five to six months to grow well. Seedlings are planted in coffee farms between the months of April and August after they are taken care of at a nursery for about a year.

9.3.2.2. Planting Seedlings and Care in the Field

Planting seedlings mostly begins in the month of May and continues up until the month of July. Seedlings grow well in the rainy months (June-August) of the year. Activities during this stage of coffee cultivation includes clearing the field using cutlass (*jame*) and digging holes for seedlings by using a wooden pointed hoe (*horda*). The Majangir do not measure the depth and breadth of seedling holes, but rely on estimation of the size of the hole depending on the size of root of seedlings. The general trend is that they usually dig small holes for small seedlings and large holes for large seedlings. However, seedling holes are commonly not more that 0.5 m deep. Preparing holes for seedlings often takes place in the month of April. The seedling holes are left opened, and exposed for sunlight for about ten days before planting seedlings. Then, seedlings are watered and taken care of in different ways until they grow well.

In most cases, coffee seedlings are planted in spaces between coffee trees. These embrace homegardens located surrounding compounds and coffee farms accessible in ten to forty-five minutes on foot. The seedlings are planted under canopy trees planted to provide shade for coffee trees. A practical field observation in coffee fields and sample measurement on the gap between coffee trees at coffee farms suggest the absence of even spacing between seedlings while planting in the field. However, the spacing

allows movement between trees and growth of lateral branches which results in good yield. Since the planting of seedlings in the field coincides with the beginning of the rainy season, for the most part of the early stages of seedlings farmers cautiously hand weed and dig the surroundings of seedlings.

Figure 9.32. A hole for coffee seedling (left). A coffee seedling planted in a garden (right).

Weeding and slashing the undergrowth in coffee farms require the full attention and commitment of farmers. Weeding of seedlings takes place in May, July and September while coffee trees are weeded twice a year in May and in the immediate days before harvesting as part of clearing the ground.

Figure 9.33.Weeded coffee seedlings.

Figure 9.34. Grown up coffee seedlings with spreading lateral branches.

To help the growth of lateral branches, farmers also cut the tip of seedlings as indicated in chapter seven of the dissertation. Apparently, one might think that cutting coffee parts is rather destructive. In reality, cutting such parts as the tip of a young coffee tree and the stem of an old coffee tree has advantages based on the experience of coffee farmers. As mentioned in chapter seven, cutting the tip of a young seedling is done to control the rate of growth. By using the method, farmers take control over the height of a coffee plant. Concomitant to this, most farmers with almost religious conviction tell that it is necessary to cut the apex of a grown seedling to allow the growth of lateral branches. To them, taller coffee trees do not yield many cherries. Besides farmers often cut smaller branches for a coffee seedling at the early age of a seedling of about a year so that the coffee tree grows straight and wider branches.

Figure 9.35. Lateral branches bearing coffee cherries.

In traditional farming system, when a coffee tree gets older, productivity declines and new seedlings are planted instead of the old. As part of increasing productivity, Majang farmers practice pruning old coffee trees using the cutlass or a saw. The main shoot is pruned in a slanting position, a process that avoids damage resulting from water that could percolate.

Figure 9.36. A shoot growing after pruning a coffee tree.

While pruning coffee trees, farmers often leave between 0.4 m to 0.6 m of the shoot above the ground. The chance of regeneration of a coffee tree after pruning is dependent on the prevailing weather condition. New lateral branches stem from tangential ends of a pruned shoot of a coffee tree. Thus, in a rainy season, a pruned coffee starts to regenerate lateral branches, which eventually start to yield coffee beans after some time. In due courses, however, a coffee tree that has been cut might grow lateral branches during the rainy season as far as the prevailing weather condition allows the growth of the coffee plant. However, this should not be confused with the act of pruning intended to allow the regeneration of the coffee plant out of

an old coffee tree known as *bägäja.*[112] Farmers also displace coffee trees from a coffee farm if they discover that its yielding capacity is insignificant and consequently plant new seedlings.

The Majangir, like the Kafecho and the Oromo, construct temporary shelter locally known *gode-tepo* (*godee-tephoo*), a small hut used to spend the day while looking after crops from such animals as monkeys, which destroy crops mainly sorghum and coffee. Guarding coffee farms is done by family members, mainly heads of a household. Women prepare *kari* for men watching after crops, including coffee. Watching after crops could be done by turns though both men and women can jointly do the task of inspection from *gode-tepo.*

Figure 9.37. *Gode-tepo* in a coffee farm, Goji.

[112] The term is used by the Majangir to refer to old coffee trees. However, there are variations in terms of age ascribed to old coffee trees. The least number of years attributed to old coffee trees is ten years, while some of my informants asserted that the older coffee trees were a hundred years though this needs to be supported by scientific evidence on the subject. Old (*bägäja*) coffee trees yield beans of poor taste compared to those from younger coffee trees.

9.3.2.3. Harvesting Coffee

The new seedlings, if properly taken care of, can grow well into young coffee trees and begin to yield cherries on the third year. The amount of yield obtained from such coffee trees progresses over the years, and particularly beginning from the fourth year, reaching the level of full harvest at the fifth year. However, there could be individual variations in terms of the onset of obtaining *od'owir*, the first yield from a coffee tree. There are Majang farmers who even put forth the idea that coffee trees begin yielding in about three to seven years after they are planted in a coffee farm. Even if it is common to see a well-taken care coffee tree to yield after three years, it is beginning from the fourth year that yields are expected annually at every harvesting season by farmers. The time required for a coffee tree to yield coffee beans depends on the degree to which a farmer pays attention towards its productivity. The period for the beginning of bearing coffee beans is variable and coffee trees flower trice before yielding and bear cherries after maturing for about five to six subsequent months turning scarlet in September though not all cherries do fully ripe squarely.

Figure 9.38. Fully ripen coffee cherries ready for harvesting.

Figure 9.39. Harvesting dry coffee cherries in the Majang village of Goji. Note: Boys transport cherries using *kante*-baskets, *gäbätoy* (*gabatooy*) -a wooden tray and *ɲire*, a traditional hand-woven tray made of grass.

Harvesting of coffee takes place between September and the end of December. However, the onset of the task varies depending on the prevailing weather. For example, over the last few years farmers have been harvesting coffee as of mid October or early November. Harvesting is often carried out in dry sunny days by handpicking red cherries. Family labor, comprising men, women and young children of both sexes, is the chief labor force during harvesting. However, farmers with a large coffee field could use additional labor, chiefly the *isho-ijägogoy* (*ishoo-ijagogooy*), people who keenly partake in caring for coffee tress through slashing and weeding and share from the harvest equally with the owner of the coffee farm, and on communal work known as *dad*o (*daado*). For people participating in the *dado*, a household organizing the work provides a reasonable amount of feast comprising such edible food as roasted or boiled maize and bread. The number of people participating in a *dado* is variable depending on the size of the coffee farm and the number of people in the neighborhood of the organizers though a minimum of five to ten people partake in this communal work. In some instances, one can summon up to thirty people to make up the

dado. Among the Majangir in the study area, participation in *dado* is cyclical as participant neighbors could demand the support of participants within a *dado* for a similar activity.

The Majangir use different sets of materials in transporting, processing and storing coffee beans. They use baskets locally known as *kante* (*kaantee*), [113]*gäbätoy* - a multi-purpose wooden tray, and sacks to transport coffee cherries. They employ *pire* (*phiree*), a grass made traditional tray to processing where as industrial sacks are chiefly used to store coffee cherries. The first task during harvesting is clearing the ground so that falling cherries could easily be seen for picking.

The Majangir employ two different methods in harvesting coffee: handpicking wet coffee cherries from lateral branches and pulling the branches and dropping cherries by hitting the branches using a stick. In late December and January, dry cherries known as *qarmi* (*qaarmii*) are collected by members of a household but chiefly women. Harvested wet coffee cherries are transported from a coffee farm to compounds using human labor. Unlike the Kafecho and the Oromo, the Majangir do not keep any pack animals and thus entirely rely on human labor for transporting coffee beans. Men participating in *dado* carry sacks filled with unprocessed cherries to the compound of the owner.

There is generally a conspicuous variation in terms of the volume of coffee harvested from a coffee farm although the amount of yield largely depends on the size of land, and the amount of care given to coffee trees and of course, the presence or absence of Coffee Berry Disease locally called *kolpopotäq* (*kolpopootaq*). Still, information obtained from farmers in the study area is almost legendary and difficult to rely on. Even then, the first yield in a hectare of land estimated between fifteen to twenty sacks of unprocessed coffee.

9.3.2.4. Drying Coffee Cherries

Harvested coffee beans are sun-dried in compounds of farmers. The cherries are exposed to sun either on drying beds (*beyroy/beyrooy*) constructed within the compound of a farmer, on canvas mats, or *goni* (*goonii*) (carpets made of *zämbaba* leaves) spread over cleared ground. Drying beds are prepared in the week immediately preceding harvest. It is constructed from wood supported by four sticks with a height below their waist, which makes it easier to spread cherries drying on the bed, covered by small woods and (*Solanecio angelatus*[114])- a tree-climbing plant known as *piĝoy* (*piijooy*), and *sänkuy* (*sankuuy*) and the bark

[113] This basket is also known as *kanta* by Majang settlers in the environs of Teppi.

[114] See the scientific name in Fichtl and Admasu (1994:65).

of *wanza* tree (*Cordia abyssinica Br.*). Drying wet coffee beans known as *jänfäl* can take between three days to a period of about two weeks although the process largely depends on the prevailing weather condition in the area. Under a sunny condition, drying wet cherries takes three to four days.

Drying on the ground is the second way of sun drying coffee beans. Farmers often clean the ground and spread canvas, *goni* and sacks on which they spread the cherries or on swept clean grounds within their compound. In some cases, drying coffee beans can also take place nearby coffee farms, particularly when cultivated fields and residential areas are quite far apart. Under such circumstances, members of a household look after the drying cherries by staying in a temporary shelter (*gode-tɐpo*) built for this purpose.

Figure 9.40. Top: Drying coffee beans on a hand woven mat (*goni*) and sun drying on the ground, Goji. Bottom: Drying coffee cherries on the ground.

For a proper sun drying, farmers clean the ground and expose the cherries in parts of the coffee farm where the sun can easily reach or in residential areas. Part of the unprocessed coffee beans is sold while a

reasonable amount of the product is stored in sacks at home to meet demand at household level. The economic value of coffee cultivated by the Majangir will briefly be appraised in chapter ten.

9.3.2.5. Material Culture Related to Coffee Cultivation

In this section of the chapter, I will briefly chart out the type of agricultural implements the Majangir employ in the cultivation of coffee. Like the Kafecho and the Oromo, the Majangir use a range of tools in the process of preparing coffee fields, planting, taking care of the plant and harvesting. Some of the materials are industrial products used at various stages of the cultivation of the crop, while others are made by themselves and only a few of them are used in the processing of the crop prior to consumption due to which familiarization of these materials and their application becomes necessary.

Present day Majang coffee cultivators deploy iron and wooden implements in preparing coffee grounds and in taking care of a grown coffee tree. They use machete (*jame*) to clear fields, remove bushes, cut and prune old coffee trees. Clearing bushes covering coffee fields allows a better growth of coffee trees and thus maximizes yield. The activity of clearing coffee fields is done by men who latter plant coffee seedlings in holes dug by using a digging tool known as *gässo,* an agricultural implement with a wooden handle attached to an ax-like metal implement fitted to a wooden shaft held with two hands while digging holes for seedlings and other similar activities. They also employ what Blench and Dedo (2006) regard as one of Africa's simplest tools still in use, the digging stick. The Majangir use a cognate term, *horda,* to refer to the digging stick with a pointed end. This implement is made by farmers from wood and is preferred for it is easier to dig holes under wet weather condition. Our knowledge of the type of agricultural tools employed before the introduction of iron is still incomplete. It is doubtful whether wooden hoes proceeded iron (Blench and Dedo 2006:3). However, it is postulated by Blench and Dedo, based on linguistic evidence, that digging sticks with pointed ends [like those made and used by the Majangir] are pre-agricultural and were used by foragers to dig out yams (*ibid*. 8). Likewise, Vincent (1985) uses the example of the Hadza of central Tanzania who dig for tubers with sharp pointed sticks. Given their proximity to iron using Oromo and Kafecho communities, it is unlikely that the Majangir were not using it in the 19th century. Nonetheless, they have still preserved an all-wooden digging stick used to dig holes to plant coffee seedlings and exploit edible wild tubers.

Other agricultural implements used in the preparation of coffee seed/seedling/ beds are two types of digging hoes: the eye-hoe or grubbing hoe and fork-hoe (mattock). While the former helps digging with less effort, the latter is used to cultivate soil deeply, move or turn heavy mulch and remove matted roots. The machete, employed in clearing fields during seedling-bed preparation, is also used in other agricultural activities.

Figure 9.41. A Majang farmer holding a digging stick (*horda*).

Akin to the Kafecho and the Oromo, the Majangir also employ another digging implement in digging holes while transplanting seedlings to coffee fields. The ax-like digging metal blade fitted to a wooden handle in *gässo* is produced by Majang forgers. Traditional smelting and forging, though absent in the study area, is practiced among Majang foragers in Godäre district. Thus, Majang coffee cultivators purchase both industrial products and the ax-shaped metal sheath attached to the wooden handle of the *gässo* from the Market in Teppi.[115] The Majangir also make use of traditional materials during the harvesting and processing of coffee. Skilled men make use of the tree climbing plant called *pijoy*(*pijooy*) to make *kante* -a

[115] The price of the agricultural implements fluctuates in time. Nevertheless, a digging hoe (eye-hoe and a fork-hoe could be bought for 180 and 150 Ethiopian birr at the Teppi market.

basket used in harvesting cherries (see figure 9.32), *pire* -a traditional tray made by women from *pijoy*- and *gäbätoy* -a bowl shaped wooden tray made by men. In the study area, there are no specialized crafts of basketry and woodworking though it is common to find *kante*,[116] *pire*[117] and *gäbätoy*[118] in households since they have other utilitarian values other than in harvesting and coffee processing. However, few people could make use of their skill to meet their own needs or make these materials when ordered by individuals. These materials are purchased from the market and used in harvesting and coffee processing apart from other uses at home.

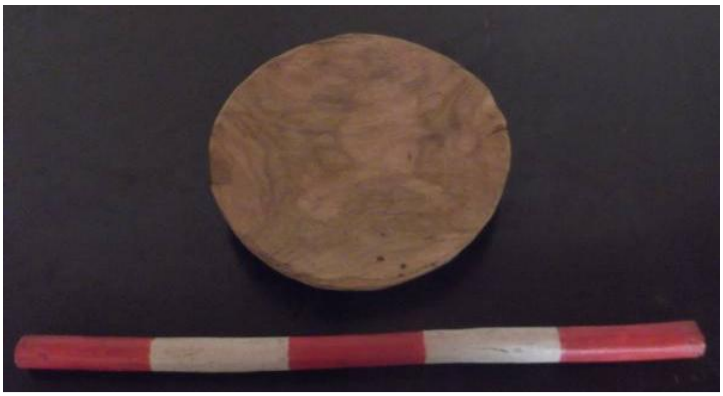


Figure 9.42. *Gäbätoy*, a wooden tray used in harvesting and other household needs.

Figure 9.43. *kante*, a basket used in transporting coffee cherries.

[116] The basket is also used by women to carry goods to and from the market, and transport tubers and corn from the farm.

[117] This tray is used to sort cereals and pick bread from griddle and store edible items such as bread and *buden* (local unleavened round bread prepared from cereals like *ɪef* and sorghum).

[118] Price given to these materials depends on the size and quality though a small sized *gäbätoy* is sold for a minimum of five birr.

Figure 9.44. *Pire,* a traditional tray used in processing coffee.

Figure 9.45.*Zämbil,* a variety of basket used in harvesting and transporting coffee beans during harvesting.

9.3.3. Coffee Cultivation among the Jimma Oromo

Akin to the Kafecho and the Majangir, the cultivation of coffee adds up to an important part of the Oromo economy in Jimma zone, one of the regions of southwest Ethiopia, where the occurrence of wild *Coffea arabica* is known (see Demenu 2008; Tadesse 2003). Note should, however, be made that this ethnoarchaeological study was conducted at Coce-Lämi, where coffee is grown in coffee farms under garden cultivation system and in plantations owned by private investors, chiefly Gomma I and Gomma II coffee plantations. Under garden cultivation system, coffee is cultivated in homegardens close to compounds, where the crop is grown interspersed with *ensät,* avocado, *khat* (*Catha edulis*) and vegetables and in farms away from residential compounds. In plantations, coffee is cultivated in modern ways using scientific methods of seedling preparation, planting and caring in the field. In this section, accent is given to the methods used in the production of the crop under garden cultivation system along with agricultural implements and materials used at different stages of the cultivation. Nonetheless, some aspects of the cultivation of the crop that are commonly shared with the Kafecho and the Majangir are discussed as a way of providing a complete account on the subject, although the purpose of each and every steps explained in the previous parts of the chapter are not restated in this part.

9.3.3.1. Acquisition of Coffee Seedlings and Care at Nursery

Analogous to the Kafecho and the Majangir, traditional cultivation methods persist among Oromo farmers in the district of Gomma. At Coce-Lämi locality, where this ethnoarchaeological study was conducted, 2,112 hectares of land was under coffee cultivation at the time of the study. Despite the efforts to introduce scientific methods of cultivation aimed at increasing production, farmers in the area have almost entirely continued to use traditional methods including a few elements from the scientific approach implemented in modern coffee cultivation.[119]

The stages in the cultivation of coffee among Oromo farmers in Coce area are very much alike with the Kafecho. Farmers often select seeds to prepare seedlings in the months of September and October when

[119] Even though many of the farmers I spoke to are aware of the theoretical aspects of the scientific methods in preparing seeds, seedling-beds and planting in the field, there are individual variations in the extent of the knowledge itself and above all, implementing these methods taught by the Development Agents(DAs).

coffee cherries ripe. This often takes place before the onset of harvesting. The stages in the preparation of seeds for seedlings are analogous with that in Kafa. The best coffee seeds are selected from mother trees with the intervention of Development Agents. Accordingly, healthy seeds are handpicked from red cherries grown in the middle part of the lateral branches. The cherries at the apex and the bottom are left, as they are relatively tiny. Then, they are kept in a plastic jar containing water where lighter cherries float over the water and are subsequently removed from the jar. Then, the cherries in the water are separated from the pulp following which the seeds are embedded in ash. The seeds coated with ash are dried under a shadow mostly inside a hut for three to four days. The purpose of that is to dissipate the moisture content of seeds by exposing them to the wind rather than the sun, which results in cracking fresh seeds. In most cases, therefore, cherries are kept in a house until the preparation of the seedbeds on which seeds are planted.

The first stage in the preparation of a nursery is selecting a site. Farmers consider soil properties and gradient of the site. Accordingly, seedling beds are primed in places near rivers and ponds to let farmers get access to water resources, or in backyards and gardens under coffee cultivation. Once a site is chosen to be a nursery site, farmers clear the area by using cutlass, dig and level the land and eventually prepare seedling-beds often 10 m x 1 m on which 1000 seedlings can grow. Although Development Agents recommend farmers to prepare seed beds 10 m x1.20 m, most have continued using the traditional methods, and it is not common to find most of the modern methods employed in the cultivation of the crop. There are, hence, irregularities among farmers in the use of the suggested dimensions. Most Oromo farmers also tell, with great emphasis, that the type of soil at a nursery should be similar to soils of a coffee farm under cultivation.

Figure 9.46. Seedlings at a nursery site in a compound.

Coffee farmers in Jimma prepare coffee seedling-beds between the months of April and May though some farmers do that later in June. They repeatedly dig the soil to make it softer and add compost prepared from animal dung to fertilize the coffee bed and later to allow the rapid growth of seedlings. Then, lines are drawn using a piece of stick in which seeds enmeshed with ash are planted. The distance between seeds is mostly between two and three centimeters, while distance between rows is about 5 cm. In planting coffee seeds at a nursery site, some farmers leave a gap of five centimeters between the planted seeds. In such cases, a seedling bed 3 m by 1 m is the norm though there are considerable variations in the dimension of seedling-beds amid farmers.

After sowing seeds, farmers mulch seedbeds to protect the bed from strong sunlight, wind, erosion and minimize evaporation. Watering is also an important task conducted in the morning and evening hours of the day. Coffee seedlings begin to emerge after forty days. At the little soldier stage, farmers remove the mulch and clear weeds and construct a shade (*das*) about 1 m high over the seedling-bed. Once seedlings emerge, farmers start to take care of the new seedlings in various ways. Watering and weeding are part of the care, the later often regularly during the morning and evening hours of the day. Two months after sowing seeds, a seedling develops two leaves and hence reaches the butterfly stage as described earlier.

Figure 9.47. A mulched seedbed.

A second way of preparing seedlings in the study area is from self-sown coffee seeds, which grow in coffee farms under cultivation. Farmers either leave them where they grow if there is enough space where they crop up or plant them on seedbeds in or nearby coffee farms, or on seedling-beds where they can be taken care of until they are transferred to coffee farms. In most cases, seedlings from farm are taken to nursery but planted arbitrary without spacing them out evenly.

9.3.3.2. Planting Seedlings and Care in the Field

Seedlings are planted in coffee farms under the garden cultivation system or in new coffee fields prepared ahead of transferring seedlings to the site. Slashing with a machete known locally as *gäjära*, repeated ploughing of the land and planting canopy trees for coffee seedlings are the requirements if a farmer is to commence the production of the crop at a new site. Transferring seedlings to coffee farms takesplace a year after the seeds are planted at a nursery. A common agronomic practice in both cases is the preparation of seedling holes. Clearing coffee fields often takes place in March and April. The first step in the process of transferring coffee seedlings is digging hole about 0.6 m x 0.6 m or 0.4 m x 0.4 m wide and 0.25 m deep. In a spacious part of a coffee farm, seedling holes are dug in lines although that depends on the space available in the farm. However, in new coffee farms, farmers dig seedling holes in lines. As in Kafa, the black top soil and the red soil from the bottom of the hole are kept separately while the holes are left opened. Thus, the holes are exposed to sunlight and refilled two or three weeks before planting seedlings in the field. During the planting stage, the black soil is refilled first followed by the red. Planting seedlings progresses between the months of May and August. The period coincides with the beginning of the main rainy season and consequently allows the growth of coffee seedlings with relative ease.

In coffee farms, seedlings are planted in a space of 1.50 m x 1 m although this is not always the case as farmers plant young coffee seedlings in available spaces in garden-coffee leaving reasonable gaps to let proper growth of lateral branches and allow movement between young coffee seedlings. Even in new areas developed under the garden cultivation system, there is inconsistency in spacing as farmers mostly rely on estimation than measurements. Planting seedlings in spaces amid existing coffee trees is above all a factor that results in the uneven nature of spacing in coffee farms. Farmers' resistance to implement modern practices in cultivation of the crop is another reason resulting in disparity of spacing. Still, coffee seedlings planted in thinly populated parts of coffee farm or new areas selected for coffee growing areas grow well and yield better than those planted closer to one another or those planted in thicker parts of the coffee

farm. Farmers in the study areas also replace dead seedlings by new ones, especially when seedlings fail to grow up after their transfer from nursery to coffee farms.

Figure 9.48. Coffee seedlings planted amid coffee trees.

Care at a coffee farm includes digging around seedlings and weeding. Farmers give a great deal of attention to weeding grasses and removing the undergrowth in the farm. Since grass and broad-leaved weeds rival seedlings, they are weeded either by hand if closer to roots or with machete (*gäjära*) if larger and cover spaces between coffee trees. For proper growth of seedlings, farmers also cut lateral branches at the lower part of the main stem. They also cut the tip part of young seedlings by hand or scissor because farmers know that it is the growth of plagiotropic branches, but not height, which is required for a good yield.

A rather distinct feature in coffee cultivation in Coce area is the presence of furrow cultivation. At Kusso (Kusoo) and Keta-Muduga (Kataa-Muduugaa) localities of Coce, coffee is cultivated using this method by digging trenches (0.8m wide and 0.4m deep) between coffee trees planted in lines on sloping areas of a coffee farm. Trenching on hilly parts of coffee farms at Keta-Muduga and Kusso localities of Coce environs is created by ploughing horizontally using digging hoe (eye-hoe) often called *zabiya*. Furrow cultivation is employed to avoid run off during the rainy season.

Figure 9.49. Coffee under furrow cultivation at Keta–Muduga.

Figure 9.50. Coffee under furrow cultivation at Kusso.

The ridge and furrow pattern at Coce is random and thus, not extensively employed though the limited application by itself has an archaeological implication. It gives the coffee farms an undulating corrugated appearance, and perhaps the continuity of the practice in the area, and the conjecture that the land will not be ploughed afterwards, the surviving ridges and furrows will likely be preserved leaving a feature of an agricultural practice. Ridge and furrow topographies are known to be very ancient and can survive for a very long time particularly if such fields are not reploughed. This has been demonstrated in other contexts, such as Medieval Britain or the Pre-Columbian Andes (Campbell and Godey 1986:323-358). It is, thus, possible to find such archaeological evidence in abandoned ancient coffee fields of southwest Ethiopia where no modification has taken place since then.

From archaeological perspectives, there is a clear absence of visible ancient coffee fields in the form of hillside terracing with or without revetted dry-stone and irrigation channels, principal farming techniques elucidated in the archaeological study of African agricultural history by Sutton (1984). Although I have not

come across the application of furrow cultivation among the Majangir in my study areas, there are unconfirmed reports of its presence at Quti, (Qutii) Ʇula (Xulaa) and Bäyämo (Bayamoo) localities in the district of Gimbo in Kafa. In these localities, farmers organized into associations use furrows to irrigate coffee farms using both rainwater and water from small rivers accumulated in wells dug for this purpose. Artificial watering through formally constructed furrows is done in time of arid weather conditions by human labor and water-pump.

Even if coffee under garden cultivation system is closer to residential areas and can easily be fertilized using compost (principally animal waste as fertilizer), there are variations among farmers in using animal manure. Even in coffee farms relatively far away, husk from coffee beans and organic fertilizers are used. Few farmers also accumulate disposals from houses including animal waste near or within farms under coffee cultivation to use it as fertilizer after clearing the undergrowth. Weeds slashed from coffee gardens can later be used as fertilizers after drying and being decomposed within the farm.

Figure 9.51. Weeds abandoned after slashing.

Figure 9.52. Accumulated waste from a homestead.

Pruning is another important caretaking activity given to coffee trees in the field. Old coffee trees known as *bägäja*[120]are mostly pruned in January and February by using a saw. The oldest coffee trees of the study area are traditionally considered to be between forty and fifty years although some of them are estimated to be seventy years. The purpose in cutting the main shoot leaving some twenty to fifty centimeters of the shoot above the ground is renewing coffee trees. A pruned coffee tree starts to regenerate by growing five to six shoots and begins yielding coffee after some time.

[120] The term *bägäja* is commonly applied by Kafecho, Majangir and Oromo farmers to refer to old coffee trees.

Figure 9.53. Pruned coffee trees, Coce

9.3.3.3. Harvesting Coffee

Analogous to Kafa and Teppi, new coffee seedlings in Gomma begin yielding after three years. As in other areas the first yield is known as *misracho,* a term derived from the Amharic "*yemisrach*" which denotes the notion of "good news." As in Kafa and Teppi area, the yield that coffee farmers obtain from coffee trees in the first three years beginning from harvesting the first yield is characterized by a steady increase in the volume of production. Even if the amount of yield during the first time is minimal, farmers are pleasant to see the fruits of their labor. At the fourth year, there is better branching of coffee trees and production from these coffee trees increases, and farmers get full harvest out of these trees at the fifth year. Yield from these coffee trees, in most cases, is not satisfactory though it increases at the fourth year reaching the level of full harvest at the fifth year. The amount of care given to coffee trees, and the presence of good weather condition are two of the most important factors affecting the amount of yield obtained by farmers.

Figure 9.54. Harvesting coffee at Coce.

Harvesting red coffee cherries in Gomma underways in September and October though there is conspicuous variation with regard to the beginning of harvesting over the years, depending on the flowering and ripening level of the coffee beans. In most cases, coffee cherries ripe turning red in September and thus, harvesting red coffee cherries can begin between late September and October. Farmers can also begin harvesting coffee earlier at a ripening stage for fear of theft. Fully ripen cherries are collected by selective handpicking. Farmers also use *oko* -a cognate term to the Kafecho *hoko*- both of which are naturally bent wooden agricultural implements used in slashing dragging lateral branches and handpick red ripen cherries. Likewise, the Kafecho employ their *gomo* for a similar purpose while harvesting. Climbing coffee trees is another resort in hand picking ripen cherries particularly when coffee trees are bigger.

Dry cherries are collected in the months of November, December and January by handpicking. Cherries are picked by hand and then kept in *täe* - a basket made from bamboo. Apart from handpicking, some coffee trees can be climbed and red cherries from lateral branches can be picked. The harvesting of dry cherries collected from coffee trees and the ground progresses in February. Two methods employed in harvesting are handpicking of fallen dry cherries from the ground and from the lateral branches and moving

the branches and dropping the cherries on cleared ground often on mats or sacks spread over cleared grounds. The Oromo of Gomma use the term *''had'a* (*haadha*)*''* to refer to coffee collected from the ground.

Harvested ripen cherries are transported to compounds of farmers and sold to merchants on price cut by the merchants who would deliver wet cherries for wet processing plants in the surroundings. Transporting the harvest can either be done using pack animals if far from living areas or by human labor if closer to living areas. Yield varies among individual coffee farmers owing to existing differences in the size of cultivated land and the presence or absence of good management practices among farmers. However, once a coffee tree starts to yield cherries, it is expected that it will continue to yield annually unless climatic conditions impinge up on its productivity. According to informants, a land of about a hectare could support five thousand coffee trees, which can yield 500 to 600 kgs *per-annum.*

"Cholera," i.e Coffee Berry Disease (CBD) explained earlier, locally known *ɪose* (*xosee*), is another problem affecting productivity. Regardless of these and other controlling factors that impinge up on productivity, farmers in the study areas can harvest four to five quintals per *facassa*- a conventional term used for an agricultural plot of 50 m x 50 m (2500 m^2). After harvesting, farmers clear coffee fields and that takesplace between the months of January and April.

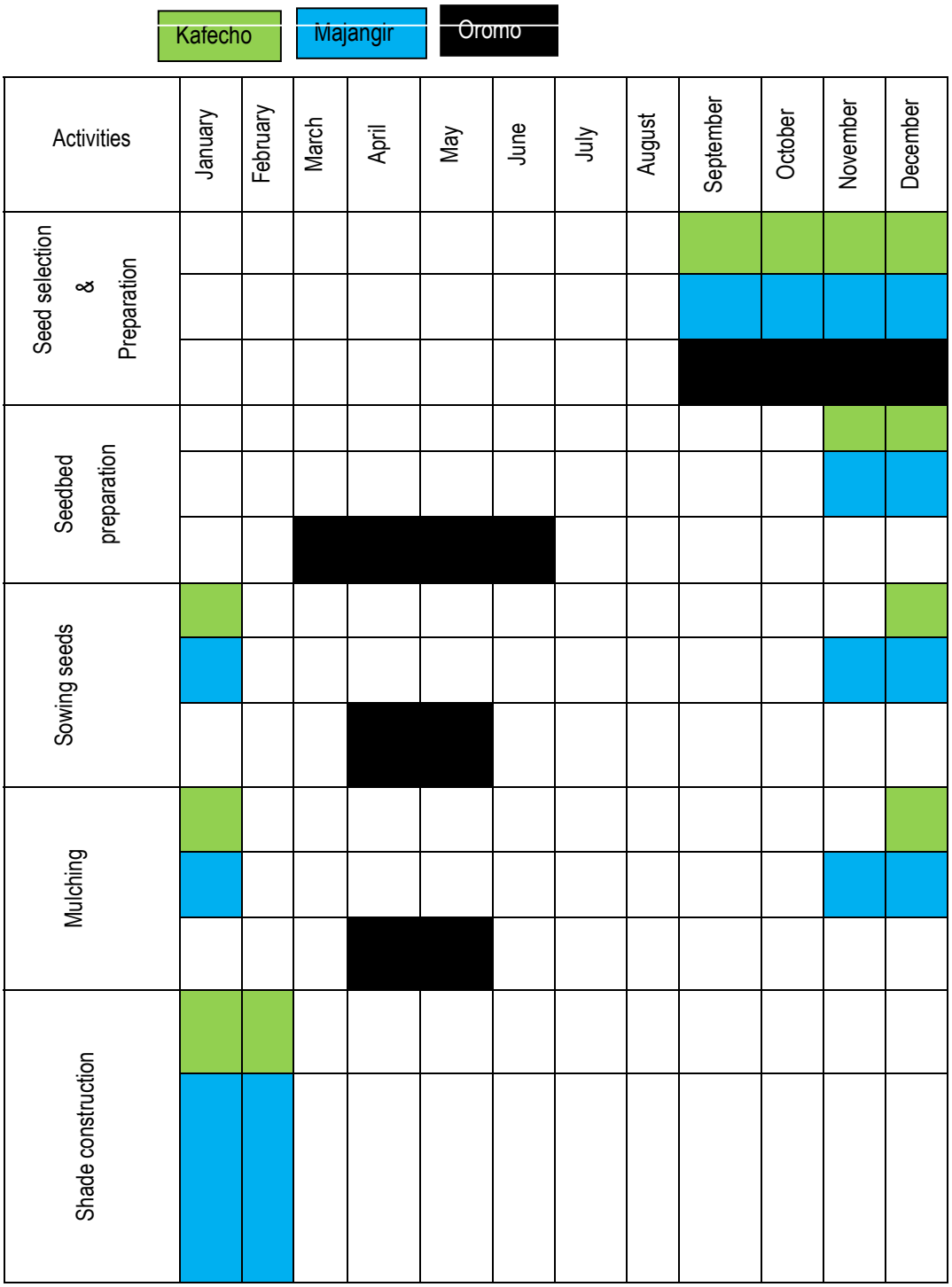
9.3.3.4. Drying Coffee

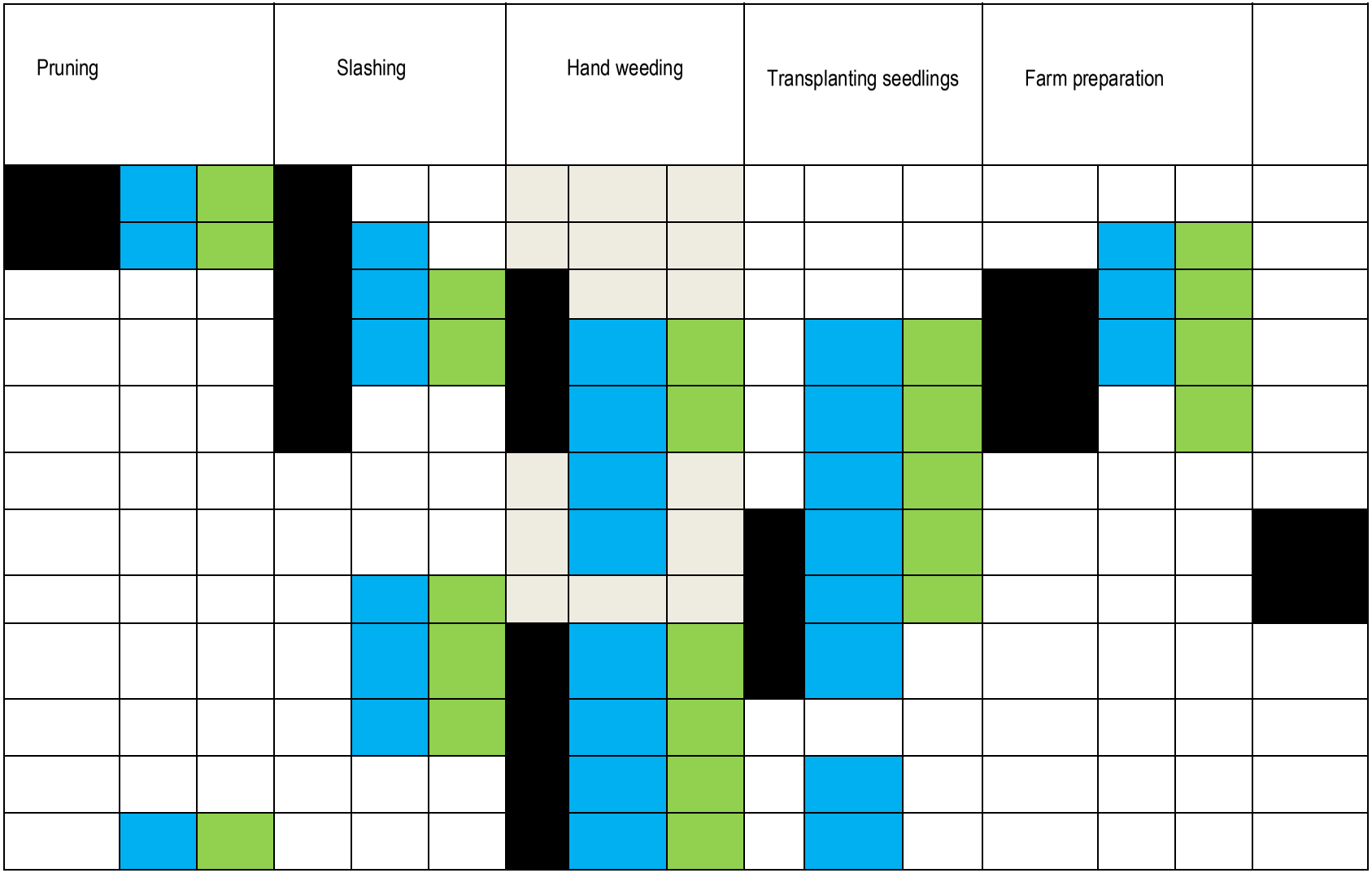
Drying coffee cherries, in the district of Gomma in general and Coce in particular, is carried out in farmers' compounds in two main ways: on coffee drying beds and on mats spread over the ground. Under sunny conditions, it takes five to seven days to sundry wet coffee cherries, although that still depends on the prevailing weather. A wooden coffee-drying bed (*sire-buna*/*siree-bunaa*) is constructed in farmers' compounds in the weeks before the onset of harvesting. The top part of a drying-bed could be covered by hand woven mats called *sälen*, plastic mats, or wire nets. Drying beds vary in height but should always be below the waist to allow inspection while drying. Members of a family, particularly women, look after coffee cherries drying in the sun and periodically scour over by hand, but often by stick and wooden rack, called *harkiftu* (*harkiiftuu*), prepared to roll cherries to allow proper drying.

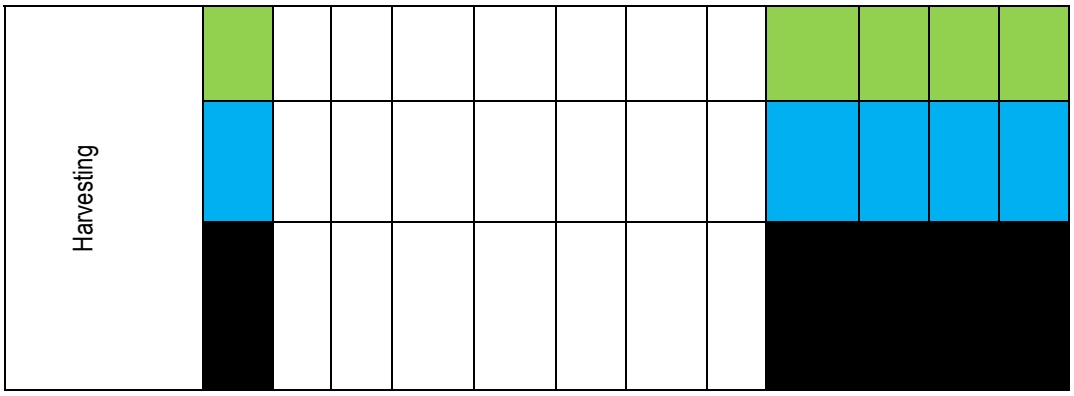
Figure 9.55. Sun drying on coffee drying rack (left) and sun drying on the ground (right).

In early days, dried coffee was stored in granaries called *gombisä* constructed in compounds from wood and covered with thatched roof. Akin to other cereals, part of the dried coffee beans is, nowadays, stored in sacks in parts of a house for consumption at household level while most of it is sold in local markets.

Table 9.4. Summary of major activities in the cultivation of coffee among the Kafecho, the Majangir and the Oromo. The months shaded in light hue indicate that hand weeding of coffee can take place at any time of the year, although the typical weeding months correspond to the shaded months in the table.




Pruning
Slashing
Hand weeding
Transplanting seedlings
Farm preparation



9.3.3.5. Material Culture in Coffee Cultivation

The Oromo use a range of industrial and traditional agricultural implements in the cultivation of coffee. The cutlass, known locally as *gäjära*, is an important industrial product used in slashing agricultural fields in the area. It is used in preparing coffee fields, cutting bushes and slashing broad-leaved undergrowth growing in coffee farms. Two types of digging implements, digging-hoe (eye-hoe) and wooden-hoe known locally as *gässo,* as among the Kafecho and the Majangir, are the principal agricultural implements used in digging. While the digging hoe (eye-hoe) is used in preparing coffee fields and seedbeds, *gässo* is the chief digging implement in the preparation of holes used to plant seedlings in homegardens and coffee farms under garden cultivation system. Oromo farmers in Gomma also make use of *oko,* a naturally bent wooden implement held by hand while slashing the undergrowth with cutlass and in holding down branches of coffee trees to handpick ripen cherries during harvesting. From morphological and utilitarian perspectives, it is identical to the *hoko* of the Kafecho.

At the harvesting stage of coffee, farmers in the study area use *tä'e*, a basket woven from bamboo. Both have other practical uses at household level apart from their use during harvesting. Although *tä'e* is typically made for harvesting coffee, it is used to store items at households during most part of the year. Taking into account morphological and functional attributes, one can draw parallels between the *tä'e* of the Oromo and the *kofo* of the Kafecho respectively. *Gundo*(*gundoo*), a traditional tray made of grass used in coffee processing particularly in the cleaning-up phase of coffee and other similar activities of preparing consumable items out of cereals is similar to the *pire* of the Majangir although it is not employed at the harvesting stage.

Figure 9.56. *Oko.*

Figure 9.57. *Gundo*, a traditional handmade tray.

9.4. Plantation Coffee in Southwest Ethiopia (Kafa, Teppi and Jimma)

The focus of this ethnoarchaeological research is on traditional coffee cultivation methods among the three ethnic groups expounded in the preceding sections of this chapter. Although the cultivation of the crop under plantation coffee accounts for only 20 % of the total production system and 5% of the total land under coffee cultivation (refer table 9.3), indicating the general characteristics of the cultivation methods involved is vital. The cultivation of coffee under plantation is run by state owned farms, smallholder coffee farms and investors (see Demenu 2008; Tadesse *et al.* 2001; Wiersum *et al.* 2007). In this production system, recommended seedlings are used, and proper spacing, mulching, manuring, weeding, shade regulation and pruning are practiced (Ayele 2011; Tadesse *et al.* 2001; Wiersum *et al.* 2007). The management of coffee production involves modern methods and improved technologies in the choice of coffee varieties, raising seedlings/nursery management, orchard establishment, etc., and post planting operations, such as shade tree regulation, cultivation, fertilization, control of weeds, diseases and pests as well as harvesting and processing using high inputs. The average yield per hectare of land under plantation coffee has also been estimated to be the highest as indicated earlier.

Among the Majangir near Teppi, garden- coffee constitutes the chief traditional cultivation system although there are plantations run by private investors. An example to be cited, here, is the Teppi Green Coffee Estate Farm, which lies in fourteen hectares of land. At its Baya coffee plantation in the outskirt of the town there are two coffee farms, *Qorca* II *and Qorca* III, where coffee is cultivated in modern ways.[121] The stages in the cultivation of coffee in modern plantation considers a range of factors principally site aspect topography, the application of modern methods in the preparation of coffee seedlings, planting and care in coffee-fields and harvesting. In selecting a site for coffee, a great deal of attention is given to an array of factors: suitability of the soil, access to water, and the presence of suitable weather conditions. The area should also be wind resistant and canopy trees should be ready for the proper growth the shade-loving plant if insufficient in terms of soil nutrients necessary for the growth of the plant. The soil should be fertilized with compost, or artificial fertilizers can be used at large scale.

[121] The seedlings brought from Sanu coffee farm were planted in lines and have flowered eight months after being planted in the farm. According to informants working at the farm, these coffee trees yield in a year's time. The types of coffee planted in plantations are selected varieties of the crop. These coffee varieties are resistant to coffee drying disease and are well adapted to highland coffee growing regions. There are also such varieties as *gesha*, *katimor* 74, *katimor* 40 and F59 adapted to lowland coffee growing parts of the area. The later represent the most widely cultivated coffee varieties in the environs of Teppi.

Figure 9.58. Baya coffee plantation in the outskirt of Teppi.

Seeds are selected from productive, healthy and disease resistant mother coffee trees. Seedlings are prepared in poly-bags or bare-root after clearing and leveling the ground. Seeds are sown at a nursery site prepared for this purpose. Care at a nursery site entails watering, preparing mulch, and building shade (*das*) when the seeds grow into seedlings. When seedlings grow on a seedbed, the mulch is removed with the purpose of hardening seedlings by exposing them to the sun and wind. Seedlings are planted in coffee farms after they are taken care of for a period ranging between seven and nine months. During this period, hand weeding and hoeing coffee seedlings are essential tasks carried out at nursery stage.

Before transferring seedlings to the coffee farm, planting canopy trees to the required number and digging holes are imperative activities. Spacing between seedlings depends on the variety of coffee, the degree of fertility of the soil, the weather condition in which it grows. Large (robust) coffee varieties are planted in 2 m x 2 m or 1.8 m x 2 m spacing. Short varieties can be planted closer to each other (1.5 m x 2 m or 1.5 m x 1.2 m). That will help to have more coffee trees in a given coffee farm. The number can be reduced in the process of growth. The spacing between seedlings is known in scientific studies, but spacing can vary depending on the fertility of the soil, the environment and the coffee varieties. Weeding continues to be a principal concern even after seedlings grow in the field.

Figure 9.59. Weeding coffee seedlings at the butterfly stage, Mekaneyesus coffee plantation (left) and coffee seedlings in rows, Baya coffee plantation (right).

The application of fertilizers depends on needs that could arise because of soil conditions of the coffee farm. After two to three years, a seedling starts to yield and turns to a mother tree. No chemicals are applied on seedlings until the 18th month after which the coffee trees become strong and hence applying chemicals and manual weeding using cutlass becomes possible. Pruning is another momentous component of the care provided to renew coffee trees. In fact, pruning is only one of the methods used to increase productivity. There are two other proved ways to renew coffee trees although pruning is the commonest of all in the area. If coffee trees get older and there arises a need for replacement, new or similar varieties are planted by removing the old trees. Yield in plantations is often affected by coffee drying disease and CBD (Coffee Berry Disease). The latter affects the *gesha* variety of coffee while minor pests, including ants, affect yield from coffee trees. Analogous to coffee trees under traditional coffee cultivation systems, coffee cherries ripe in September and harvesting begins in September or October and continues until the mid January. Red cherries are handpicked by daily laborers and processed in modern ways, using the wet processing technique explicated in the subsequent part of the chapter.

9.5. Coffee Processing in Industrial Plantations of Southwest Ethiopia (Kafa, Teppi and Jimma)

Fruit removal and drying of the beans, two related activities in the cultivation of coffee, can be done in a range of different steps (Desse 2008; Thurston *et al.* 2013). In Ethiopia, wet and dry coffee processing are the two commonly used methods in processing coffee (Desse 2008:318). Common to both methods is that they make use of machines to remove the mucilage of wet coffee beans and the husk of dried cherries.

In lieu of presenting the nature of coffee processing at an individual site, this part of the chapter portrays the types of coffee processing common to the three study areas: Kafa, Teppi and Jimma where both wet and dry coffee processing methods are employed. While wet processing plants actively engage in processing coffee during harvesting of ripen cherries, the dry coffee processing plants operate for most part of the year depending on the amount of coffee produced in their respective localities. At the height of harvesting, particularly between October and December, farmers sell ripen coffee cherries to private wet coffee processing plants in their surroundings. These processing plants purchase wet coffee cherries from coffee farmers of the area at a cost fixed by them. Wet coffee cherries are kept in a store to be processed by a wet coffee processor –a machine found in a separate room. Coffee beans are then separated into first grade and second grade using sieve-like iron tray at the base of the processing machine. In the course of processing, coffee beans are ranked as first grade-clean coffee, which sinks, and second grade- coffee that floats over the water in the concrete built cannel at the base of the processing machine. Both types of coffee cherries pass through different cannels leading to the temporary tanker constructed from cement. The first grade coffee settles in the tanker containing water for two to three days depending on the condition of the sun. Then, it is released to the second cleaning tanker where the beans are cleaned by human labor. The same is true of the second grade coffee, which is cleaned, and only the good quality coffee beans are selected for drying. Sun drying is done on a drying bed (L x W x H = 30 m x 1.65 m x 0.80 m) constructed from wood covered with wire and net in the compound of a coffee processing plant where daily laborers use wooden racks to prod coffee beans.

Figure 9.60. A wet processing plant at Coce, Gomma.

A wet coffee processing plant operates only during harvesting season. Nonetheless, supply of wet cherries fluctuates yearly depending on the yield available during harvesting seasons. At the time of the study, dry processing plants are absent in Mankira where a single plant separates the wet cherries cultivated in the vicinity. Data from the Agricultural Office of Gimbo indicate the presence of four wet coffee processing plants and six more dry processing plants that process coffee cultivated in the area, particularly of the eighteen *qäbäles* of the district that specialize in the cultivation of the crop.

A large number of both types of processing plants can be found in the environs of Teppi and Agaro. Compared to wet processing, my observation at two dry coffee processing plants in Teppi indicate that dehulling or dry coffee processing is a rather labor intensive undertaking involving large number of people loading and unloading unprocessed dry coffee cherries, sorting, dehulling and grading being the major components of the work involved.

Figure 9.61. Women sorting coffee at a dry processing plant in the outskirt of Teppi.

Wrapping up the discussion on coffee processing methods in the study areas, two important points need to be accentuated: wet coffee processing plants require a large supply of water, and the quality of beans resulting from the process is considered better after drying. The latter proposition is supported by Desse (2008:318), who highlighted the less defective nature and intrinsic quality retained by coffee beans processed using the wet method.

9.6. Comparing Coffee Cultivation in Southwest Ethiopia (Kafecho, Majangir and Oromo)

Notwithstanding certain areas of differences, the cultivation of coffee among the three ethnic groups, the Kafecho, the Majangir and the Oromo, is characterized by some common features manifested in agronomic practices relating some aspects of the acquisition of seedlings, planting and care given to coffee trees in the field. There is variability in the type of coffee cultivation systems practiced in the study areas. While the Kafecho produce coffee through the three traditional cultivation systems (forest-coffee, semi-forest coffee and garden-coffee), the Majangir in the environs of Teppi, and the Jimma Oromo at Coce in the district of Gomma depend on garden cultivation system.

Garden-coffee cultivation among the three ethnic groups is characterized by such common agronomic practices as seed selection, preparation of seedlings, care in the field and harvesting. Farmers in all the three study areas prepare bare-footed seedlings from both self-sown seeds and seeds selected from productive and healthy coffee trees. Of two distinct ways of acquiring seedlings known among coffee growers, seedlings from spontaneously growing coffee seeds need the care of farmers only after their transfer to seedling beds prepared in backyards, near to or in farms under garden-coffee cultivation system. In this regard, the Majangir, unlike the Kafecho and the Oromo of Jimma, make use of self-sown seedlings in an exceedingly high magnitude. However, in all the three cases, self-sown seedlings are left either where they grow or planted in spacious parts in coffee farms under the forest and semi-forest cultivation system as in Kafa, and in garden-coffee among farmers of the three ethnic groups. On the other hand, seedlings prepared from selected seeds call for a high degree of involvement in the natural growth of seeds beginning from sowing. This is manifested in such intervention as mulching, hand weeding and hoeing at a nursery stage, and of course a periodic intervention in weeding, hoeing, slashing and pruning after seedlings are transferred to coffee farms. In fact, there is a slight variation in the beginning and execution of such related activities as seedbed preparation, sowing seeds, mulching and shade construction. Simultaneously, there is variability in the onset and duration of transferring seedlings from nursery sites to coffee fields, slashing and pruning. There is also a high degree of similarity in the agronomic practices relating garden-coffee cultivation system. A major area of discrepancy, apart from those outlined above, is the presence of furrow cultivation in Coce-Lämi locality, a feature which is absent among the Majangir and the Kafecho studied by this ethnoarchaeological study. Note should be made here that there are unsupervised reports of the presence of furrow cultivation in Kuti, Tula and Bäyämo localities in the district of Gimbo in Kafa- areas unassessed by this investigation.

There is also a certain degree of resemblance in the type and application of agricultural implements. While industrial products used in the cultivation process remain similar, farmers in the study areas have continued to use primitive forms of wooden implements employed at various stages of the cultivation process. To a certain degree, one could draw a parallel between the agricultural implements employed in the entire process of coffee cultivation. From the perspectives of use, therefore, two distinct categories of materials could be recognized: implements used in the process of cultivation (from the preparation of seedlings to the harvesting stage) and other utilitarian tools used in the process of harvesting and drying coffee. Common agricultural implements among coffee growers in the study areas employed in the preparation of nursery

sites, coffee fields and caring coffee are made by artisans, farmers themselves or are industrial products. The cutlass, known as *gäjäro, jame* and *gäjära* among the Kafecho, the Majangir and the Oromo correspondingly, is an emblematic agricultural implement used in slashing undergrowth and cutting stems and cutting tree climbing plants occurring in coffee farms. It is employed in similar ways in other agricultural activities in the areas and particularly among the Majangir who practice slash and burn agriculture. Another agricultural implement, the digging stick commonly known as *gässo* is used in digging holes for coffee seedlings. This implement allows for deep penetration and is effective to work with solid soils. A digging stick made entirely in wood, *horda,* is still in use among the Majangir, who equally employ this implement alongside with *gässo.* It is preferred to work on softer soil and in wetter environment. Likewise, the *kotero* of Kafa is made of a sharp metal sheath socketed into a naturally bent wooden handle and is used in hoeing coffee seedlings. There is no parallel to this agricultural implement among the Majangir and the Oromo of Jimma, who use the fork-hoe in hoeing coffee seedlings. The eye-hoe (*zabia*) and the fork-hoe are two industrial agricultural tools often used in preparing nursery sites and working in coffee farms as described in the corresponding parts of this chapter.

On the other extreme of the spectrum, we find entirely wooden implements used in slashing coffee farms and other similar activities. In this category fall the *hoko* of the Kafecho and *oko* of the Oromo. While the *hoko* and *oko* are two morphologically and functionally identical implements used by one man to bend bushes while slashing and to heave weeds from cleared coffee fields. The *gomo* of the Kafecho is used for a similar purpose though in different context. It is similar with *hoko* and *oko* though it is longer, and is used to bend bigger shrubs held independently by one man while another man slashes the undergrowth by using cutlass (*gäjäro*). These wooden tools are of indistinguishable morphology and function although the application of *gomo* in slashing and preparation of coffee fields requires the participation of two individuals who simultaneously drag and slash. Common to all these set of implements is that they are used alongside with the machete. Nevertheless, the *gomo* of the Kafecho and the *oko* of the Oromo in Jimma are also employed at the harvesting stage independently as they can be used to lean branches of coffee trees while handpicking ripen cherries. The three wooden implements (*hoko, oko and gomo*) are made from a naturally bentwood treated with smoke after removing the bark. Sometimes farmers could tie the apex part where the wood bends with the part used as a handle to improve the natural curving.

At the harvesting stage, farmers use a variety of objects made from a variety of raw materials. Based on material attribute, two categories of artifacts are identified in the study area. The first category of artifacts constitutes baskets: *kofo* of the Kafecho and *kante* of the Majangir made from two tree climbing plants known as *pio* and *pijoy* respectively and *tä'e* of the Jimma Oromo woven from reeds of bamboo. *Zämbil*, a basket made from leaves of *zämbaba,* is commonly used in the study areas during harvesting.

The Majangir use two types of trays during harvesting: *gäbätoy* and *pire* made of wood and a tree climbing plant known as *pijoy* respectively. Both have other utilitarian uses in household activities, as we shall see in the next chapter of the dissertation. However, it is good to note that the production of baskets i.e *kofo, kante* and *tä'e* of the Kafecho, the Majangir and the Oromo correspondingly and wooden trays (*gäbätoy)* of the Majangir are of male expertise. On the other hand, three of the trays, *gämo* of the Kafecho, *pire* of the Majangir, and *gundo* of the Oromo are of female specialty. Unlike pottery production in the study areas, there are no special social groups associated with the production of these utensils. Accordingly, it is difficult to tell assertively about the identity of the crafts of these materials, which either are purchased from the markets or made by skillful individuals living amid the people of the study area. In fact, few skilled men can make baskets and *gäbätoy* among the Majangir. Analogous to pottery among the Majangir, the skills required to produce these materials are not characterized by a caste system, which is a direct opposite to pottery and smithing among the Kafecho, and the Oromo in which case specialized caste systems are known.

Harvesting coffee in the study areas largely relies on family labor. On the other hand, the role of communal work in harvesting shows a high degree of variation among the three ethnic groups in the studied areas. While Kafecho and Oromo farmers tell of the nearly vanishing nature of communal works (*dado*) during harvesting, the Majangir have continued the practice in harvesting coffee as need arises in cyclic manner. Some Oromo farmers of the Coce-Lämi locality in Gomma, apart from using family labor, make use of seasonal laborers from the surroundings, mainly of the Kullo and Dawro.

There also exists a high degree of similarity in methods employed in drying coffee. Sun drying is carried out on wooden drying racks*, qombe-shibo, beyroy* and *sire- buna*, used among the Kafecho, the Majangir and the Jimma Oromo respectively. The Kafecho in the study areas also use *bune-qono* -mats made from the tree climbing plant known as *pio,* to dry coffee*.* Common to the three study areas is the use of *sälen* (also

known as *goni* among the Majangir) -mats woven from *zämbaba* tree. Sun drying coffee on cleared ground is common in the study areas particularly among the Kafecho and the Majangir where coffee collected from the ground are exposed to the sun. Some farmers in Coce locality also dry coffee on cemented floor near residential areas.

Table 9.5. Synoptic summary of implements used in the cultivation of coffee.

	Digging	Slashing	Harvesting
Kafecho	Socketed hoes: *kotero,gässo*	Machete:*gäjaro,* Bent sticks*: hoko* and *gomo*	Hand, bent stick(*gomo* and basket(*kofo*)
Majangir	Digging stick: *horda* Socketed hoe: *gässo* *Eye-hoe and fork-hoe*	Machete: *jame*	Hand, basket (*kante*) and stick
Oromo	Socketed hoe: *gässo* *Eye-hoe and fork-hoe*	Machete: *gäjära* Bent stick: *oko*	Hand,basket (*tä'e*) and stick

Table 9.6. Synoptic summary of gender role in the cultivation and processing of coffee.

	Seed preparation		Seedling bed preparation		Planting seedlings		Weeding		Slashing		Harvesting		Processing	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Kafecho														
Majangir														
Oromo														

Table 9.7. Synoptic summary of implements used in the processing of coffee.

	Coffee Processing	
	Drying	Sorting Trays
Kafecho	Hand, stick, wooden platform(*qombo-shibo*) Mats:*Bune qono/ sälen*	*Gämo*
Majangir	Hand, stick, wooden platform (*beyeroy*),mat:*sälen*(*gindo*)	*Pire*
Oromo	Hand, wooden rack(*harkiftu*)/stick, wooden platform (*sire-buna*), mat: *sälen*	*Gundo*

9.7. Modeling Strategies for Coffee Exploitation and Domestication

"The question "why farm?" strikes most of us modern humans as silly"

Jared Diamond (2002:700)

The central question about the origins of coffee agriculture, which I consider in the forthcoming parts, has to do with the way human beings eventually started tending the plant long after the beginning of most cereal food crops. In biological and archaeological terms, the exploitation and domestication of coffee is a fascinating subject to deal with. Two different perspectives, the nature of human-plant-relations in general, and the strategies in play in the process of exploiting and domesticating the plant in particular are central points that receive proper consideration in this part of the chapter. Notwithstanding the alternate views on the history of the discovery and consumption of the plant, the trajectory in replacing wild cherry gathering with coffee agriculture is still a subject open for theoretical debate. In putting forth logical explanations on the exploitation and domestication of coffee, therefore, one needs to ponder on the possible strategies employed in the transition from exploiting wild coffee to careful selection and breeding of the plant. The principal enquiries here focus on the identification of the path in replacing wild cherry gathering with coffee agriculture and the fundamental technological and social changes that contributed to the transforms in the relationship between humans and coffee. An additional query could anchor on whether environment was a fundamental cause in the changing relationship. In this context, this section is a précis of the noticeable variations in the degree of human involvement in three of the four cultivation systems of coffee presented in detail in this chapter: garden-coffee, semi-forest and forest-coffee cultivation systems. It is that chapter which provides the setting in conceptualizing and modeling the process that might have involved in the course of domestication. Only through a better understanding of these traditional methods of coffee cultivation systems in the in southwest Ethiopia that one could better discern the variation in the degree of human involvement extant between forest-coffee, semi-forest and garden-coffee cultivation systems.

9.7.1. Variability in Human Interference in the Cultivation of Coffee

There is a perceptible variation in the management level of coffee farms in southwest Ethiopia. Traditional coffee cultivation system, embracing garden, semi-forest and forest-coffee, is characterized by variation in terms of the degree of human involvement in the natural growth and reproduction of the plant and, hence, an unavoidable difference in yield although both the management level and yield are relatively low compared to the modern coffee plantation system, which also employs modern technologies. Based on the activities involved in the production process, one can infer the presence of a higher degree of farmers' involvement in garden-coffee cultivation system than coffee cultivated in the forest system (i.e. semi-forest and forest-coffee cultivation). A synopsis of the various activities in these cultivation methods is portrayed in the table below.

Table 9.8. Variation in the types of activities in traditional coffee cultivation system in southwest Ethiopia.

Activities	Garden-coffee	Semi-forest coffee	Forest-coffee
Seed selection			
Seedling-bed preparation			
Planting sedes			
Mulching			
Shading			
Weeding at a nursery			
Transplanting seedling to farms			
Weeding			
Slashing			
Pruning			

As indicated in table 9.8, there is a strong human presence in the growth and production of coffee under garden cultivation system. The direct care given by humans declines progressively in coffee farms under semi-forest and forest-coffee cultivation systems where humans take care of self-sown seeds growing densely or sparsely and later leave them where they are or plant them in spacious parts of the forest, carry

out the weeding and slashing and collect the yield during the harvesting season. Weeding is an indispensable and demanding task in traditional coffee cultivation system although the scale varies across individual farmers and between each one of the garden-coffee, semi-forest coffee and forest-coffee. By the sheer volume of work required in cultivating coffee under garden cultivation system, one can surmise the existing differences in intensity of coffee farming between those cultivated in gardens and the natural forest. The implication is that the stronger the involvement in the natural growth and reproduction of the plant in the domesticated varieties of coffee under cultivation, the greater the change in the dependence of these varieties of plant in their natural existence.

The crux of understanding the transition from exploiting wild coffee to the onset of the cultivation of the plant was, without a shadow of doubt, one of the most significant period in the evolution of a plant that is not only consumed globally, but also has become the basis of the economy of numerous developing countries in the tropical world. The selection of seeds and transferring seedlings from coffee trees growing in semi-forest and forest-coffee to farms under garden coffee cultivation has such implications as how the seeding and harvesting of the plant might have started. These apparently simple activities attached to the exploitation of "wild" coffee growing in the forest set in motion a long-term process that has led to the dominance of coffee agriculture, as we know it today. The presence of forest and semi-forest coffee cultivation in southwest Ethiopia provides an ideal condition to see the way humans exploit forest-coffee and transform it in garden-coffee. This can serve as a window to the past relation between humans and the plant resulting in the gradual domestication of the plant. The management of forests by hunter-gatherers prior to agriculture has been already explored ethnoarchaeologically. The Nukak hunters, for example, propraite the growing of chontad uro palms, that they use to obtain carbohydrates from the coconuts (see Greaves and Kramer 2014:265,267; Politis 1996:495).

Depending on the variability of the management level in the cultivation of coffee in southwest Ethiopia, one can distinguish three different levels within the general continuum. The common trend is that human involvement in the management of coffee and productivity increases as one moves from the exploitation of forest-coffee to plantation-coffee. The general observation on the relation between human involvement in the management of coffee and the accompanying variation in yield accords with the postulation made in the work of Ayele (2011).

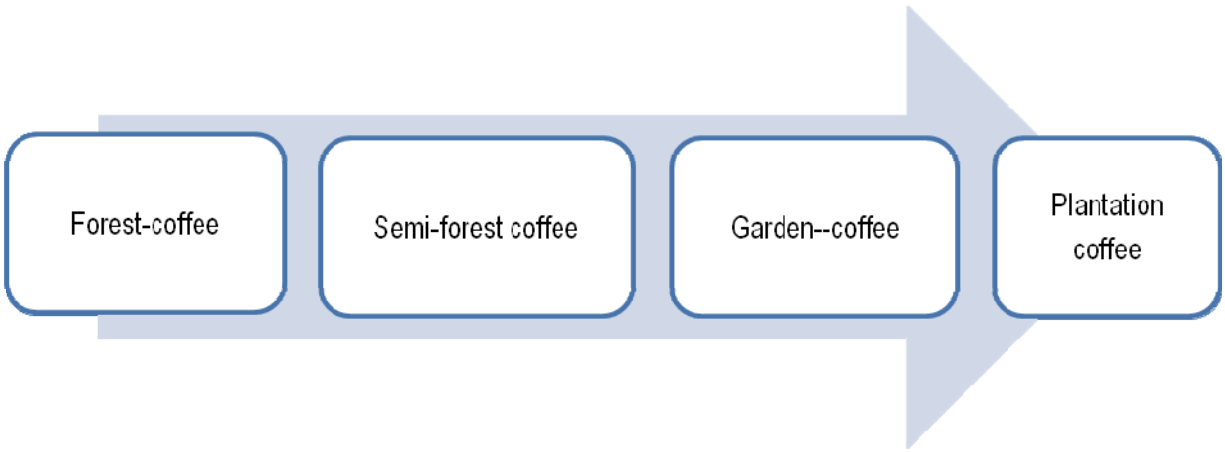


Figure 9.62. Continuum in the intensity of coffee management and yield. Intensity in human involvement and yield increases from left to right in the continuum (after Ayele 2011).

9.7.2. Variation in Intensity of Coffee Management and Change in Genetic Diversity

In this section, I concisely examine the variation in the intensity of coffee management in the three traditional coffee production systems (forest, semi-forest and garden-coffee) and the genetic diversity of *coffea arabica* within these cultivation systems. Forest and semi-forest cultivation systems are dominant in southwest Ethiopia and Bale (see Labouisse *et al.* 2008: 1080). The intent, here, is to assess some phenotypic features of coffee grown under these three cultivation systems, the current state of genetic diversity of *Coffea-arabica* in southwest Ethiopia and the genetic diversity within the different cultivation methods and between the major coffee growing regions to the west and east of the tectonic rift ('Great Rift Valley'). Conflating an array of data from a recent research on the subject, and my own field observation, I depict the link between coffee management strategies and the variation in genetic diversity to formulate a plausible model of the domestication of the plant. There is, indeed, a direct link between the intensity of coffee management and productivity, and hence low yield due to limited human intervention in forest and semi-forest coffee cultivation. On the other hand, as a consequence of the varying levels of agronomic practices, there is a relatively better management in the garden-coffee production system, which is by far better and more efficient than the forest and semi-forest systems and hence production is far better than the other two if not close to yield from plantation system (Ayele 2011:45). Results of this ethnoarchaeological study, coupled with previous research (for instance, Aerts *et al*. 2011, 2013; Feyera and Denich 2006; Schmitt *et al*. 2009), confirm the difference in the intensity of management in traditional

coffee cultivation systems. Accordingly, Forest-Coffee (FC) and Semi-Forest Coffee (SFC) systems are distinguished by little or a total absence of human interference and annual removal of herbs, non-coffee shrubs and cropping –tree seedlings in the undergrowth are removed by slashing, the upper canopy is selectively thinned and local coffee seedlings are planted.

Considering the range of coffee production systems, it is not easy to create a clear dividing line between wild forest-coffee and cultivated ones. The steady shift between wild forest-coffee and cultivated ones not only influence the structure and species richness of the production systems but also the genetic diversity of coffee (Ayele 2011; Tadesse *et al*. 2001). The forests of southwestern highlands of Ethiopia are irrefutably the center of diversity for *Coffea arabica* where as the garden systems in eastern Ethiopia (for instance, Hararghe) comprised of a particularly rich landraces (Labouisse *et al*. 2008). It is also known from the work of Kassahun (2006) that most wild coffee regions have their own genotypes with high levels of genetic diversity within their respective regions. However, an increasing management of coffee trees leads to a gradual domestication of coffee accompanied by a continuing dwindling in the original genetic diversity of the plant. The four coffee cultivation systems, presented in this dissertation, exist nowhere in the world, but only in Ethiopia (see Labouisse *et al*. 2008:1081). This shows the enormous opportunity to critically observe and document existing differences in the intensity of human intervention in the exploitation and cultivation of the crop in southwest Ethiopia as depicted in the forthcoming section.

What farmers traditionally call “wild-coffee” also appears in literature referring to the same coffee genotypes (see Labouisse *et al*. 2008). It is here where one can see seedlings growing spontaneously from fallen coffee cherries, which are left either where they germinate sparsely, or planted in open spaces if they grow thickly. Under the forest cultivation system, farmers fundamentally tend coffee trees for suitable picking. In relative terms, the degree of human interference in the management of coffee trees in semi-forest coffee is rather intense. Farmers slash weeds, undergrowth, lianas (tree climbers) and competing shrubs, thin forest trees and fill open spaces with local seedlings. Garden-coffee, along with forest and semi-forest coffee,[122] is cultivated in traditional ways in southwest Ethiopia although the degree of human involvement in the

[122] The process of the management of SFC leads to changes in the composition of forest structure, shrub and canopy species (Schmitt *et al*. 2009; Aerts *et al.* 2011) without affecting the genetic diversity of coffee population within the forest. It is rather the introduction of genetically diverse coffee genotypes from other areas into SFC that has an impact on the original coffee diversity (Aerts *et al* 2013).

process of cultivation is more intense than the remaining two. The process of the management of SFC leads to changes in the composition of forest structure, shrub and canopy species (Schmitt *et al*. 2009; Aerts *et al.* 2011) without affecting the genetic diversity of coffee population within the forest. To a certain extent, it is the introduction of genetically diverse coffee genotypes from other areas into SFC that has an impact on the original coffee diversity (Aerts *et al* 2013). Under this cultivation system, seedlings are taken from forest-coffee plantations and planted in coffee fields nearby farmers' dwellings under a few shade trees combined with other crops and fruit trees as explained earlier. As Labouisse and his associates put it "…the planting materials in garden-coffee system result from a complex process of transport, exchanges and selection by farmers and adaptation to environments that are sometimes distinct in (geographical and ecological terms) from its original habitat" (See Labouisse *et al.* 2008: 1081). Looking into the present ways in which coffee seedlings are obtained, transported and propagated into new farms' land, one can presume the methods that might have involved during the onset of domestication and cultivation of coffee. What is interesting from the stance of archaeology is related not only to the mode of seedling acquisition and exploitation of wild coffee growing in the forest-coffee cultivation system, but it is connected to the degree of managing the coffee trees. In this context, there is absence of the role of humans in the stimulation and regeneration of coffee trees in the forest cultivation system. On the other end of the spectrum, there is a relatively high involvement of farmers in the management of semi-forest and garden-coffee as farmers' direct contribution to stimulation of production and regeneration practices increases correspondingly as presented above.

	Coffee cultivation systems	Coffee Management Practices		
		Maintenance and protection	Stimulation of production	Regeneration practices
Traditional	Forest-coffee	a) Harvest according to the maturity of cherries. b) Decrease competition by little weeding.	None	None
	Semi-forest coffee	a)Harvest according to the maturity of cherries: stripping method, increasing trend of picking the red cherries b)Decrease competition by regular weeding	a) Optimization of soil conditions by mulching b)Shade regulation	a) Protection of the natural regeneration b)Purposeful spacing of wild coffee seedlings
	Garden- coffee	a)Harvest according to the maturity of cherries: selective method b) Decrease competition by intensive weeding c)Sanitary pruning	a)Occasional rejuvenation prunning b) Optimization of soil conditions by mulching c)Fertilization with manure	a) Protection of the natural regeneration b) Transplanting of seedlings from FC and SFC
Modern	Plantation-coffee	a)Harvest according to the maturity of cherries: selective method b) Decrease competition by intense weeding c) Sanitary pruning	a) Occasional rejuvenation prunning b) Optimization of soil conditions by mulching c)Shade regulation d)Fertilization with manure	a)Protection of the natural regeneration b) Transplanting of seedlings from FC and SFC

Table 9.9. Management practices in the different coffee cultivation systems. Adapted from Laurence (2003) and Ayele (2011) with add-ons by the author.

Studies on the phenotypic diversity in traditional coffee cultivation system attributed to different scholars (for example, Charrier 1978 in Labouisse *et al.* 2008; Sylvian 1955; Montagnon and Bouharmont 1996) point towards the presence of large phenotic diversity amid coffee trees cultivated under the traditional production system. The results of these studies show the presence of two major phenotypic categories (Labouisse *et al* 2008; Montagnon and Bouharmont 1996:221). Group 1 mostly consists of coffee

accessions collected from west of the Rift Valley where coffee trees with upright lateral shoot, arrower leaves often more resistant to leaf rust and coffee berry disease than those to the east of the Rift. Group 2 within the phenotypic diversity was gathered east of the Great Rift Valley in Ethiopia. The latter embodies cultivated coffee varieties found all over the world and Ethiopian accessions This phenotypic constitution coupled with historical data hints that "group 1 has not been involved in the domestication of *C. arabica"* (Montagnon and Bouharmont 1996:221).

Based on the pattern of coffee seedling propagation and the variability in the intensity of human involvement in the growth of coffee, it is perhaps possible to infer that the early exploitation of the plant and its eventual domestication could have occurred in the manner present day coffee farmers in southwest Ethiopia acquire and grow coffee seedlings from the forest. These seedlings are grown in a separate niche, often close by dwelling areas where there is a regular contact between farmers and the plants leading to mutual interdependence. The resulting changes in the natural growth, morphology and breeding of the plant and yield from coffee trees. Current trends in the variation of the growth of coffee trees growing under traditional coffee cultivation system (FC, SFC and Garden-coffee) pinpoint to how humans changed yields obtained from "wild coffee" growing in the forest in which coffee grows copiously. In the forest-coffee cultivation system, coffee trees are rivaled for nutrients by bushes and woody plants.

The onset of transporting spontaneous coffee seedlings growing in the forest to open farms and tending them in an intense way than those naturally growing in the forest can be regarded as a turning point that led to the domestication of the plant and the gradual changes that discern domesticated coffee from its wild counterpart. Phenotypic characteristics of a plant [including coffee] are determined by environmental factors and growth stages of the plant (Esayas *et al* 2003). However, studying morphological characters in perennial plants like coffee often require a lengthy and expensive evaluation during the entire vegetative growth of the plant. Although it is tricky to discern the morphological variation between coffee trees cultivated in the study areas, it has been noted that the presumably well managed domesticated garden coffee is still weedy in character exhibiting morphological features of "wild coffee" growing in the forest.

Four different crop domestication models,[123] the bread wheat model, the cotton model, the soybean model, and the chili pepper model proposed by Van Raamsdonk (1995:367-399) have become the basis of

[123] Besides the four models, Van Raamsdonk (1995) also noted the possibility of the occurrence of "mixed-model" situations.

categorizing the genetic mechanisms of crop domestication. Accordingly, the domestication of coffee (*Coffea arabica*) falls under the "bread wheat model," which is explained by inter-specific hybridization involving at least one domesticated species followed by polyploidization.[124] Resultant amphiploids[125] are reproductively isolated. The domestication process under this model involved such crucial actions by humans as bringing formerly isolated plant population, selection and propagation of rare amphiploid plant(s) found in or near cultivated fields (Van Raamsdonk 1995; Cox 2009).

The current human interaction with coffee plant is indicative of the circumstances under which wild coffee, naturally growing in the forest, was exploited and ultimately domesticated. It is also possible to surmise that humans first exploited coffee in the forest for the beans and then began to propagate seedlings in open fields, which gradually led to the domestication of the plant resulting changes in phenotypic characteristics of the plant though garden-coffee cultivated in the southwest is still considered semi-domesticated due to its weedy character.

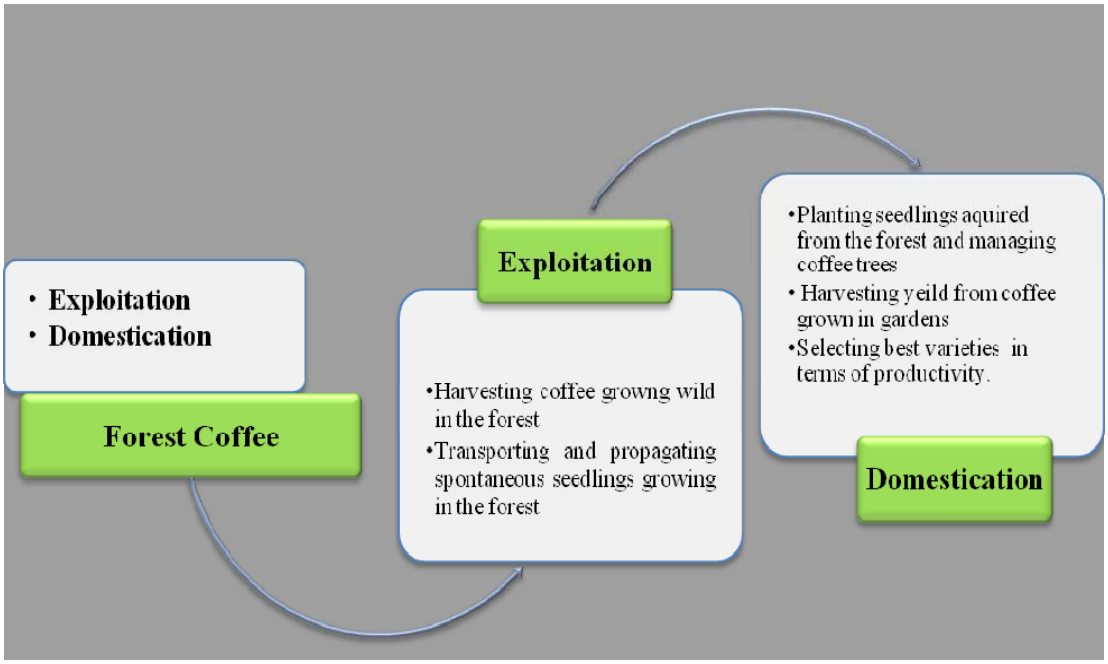


Figure 9.63. A model summarizing pathways in the domestication of coffee (based on the author's ethnoarchaeological research in southwest Ethiopia).

[124] It refers to the increase in the genome size due to the inheritance of additional set (sets) of chromosoms (Otto 2007). It is common in plants and some tissues of animals(see Parmacek and Epstein 2009)

[125] Amphiploid are an inter-specific hybrid with a minimum of a complete set of chromosomes inherited from each parent species (Griffiths *et al*. 1999).

The preparation of coffee seedlings from the beans and modification of the forest through planting canopy and propagating seedlings in spacious parts and marginal areas of what we today call semi-forest coffee might have begun latter with the intensification of the exploitation of forest-coffee. Thus, the beginning of the domestication of the plant has its roots in the exploitation and gradual tending of forest-coffee. In the absence of archaeological data on early methods and technologies employed in the cultivation and harvesting of coffee, the still traditional ways of cultivating the crop hint at the possible use of simple wooden implements still in use by coffee growers in southwest Ethiopia. Pointed digging tools presently used by the Majangir and in the coffee growing highlands of Kafa could perhaps be the reminiscence of a technology that once was largely employed in the preparation of coffee fields and such auxiliary agricultural activities as planting trees and other edible perennial plants (for example, fruits). Wooden implements clearance of bushes in the preparation of coffee fields must have involved the use of such wooden implements as *gomo* and *hoko* and *oko* of the Kafecho and the Oromo respectively.

CHAPTER 10

COFFEE PROCESSING AND CONSUMPTION (KAFECHO, MAJANGIR AND OROMO)

"With every cup of coffee you drink, you partake of one of the great mysteries of cultural history."

(Weinberg and Bealer 2002:3)

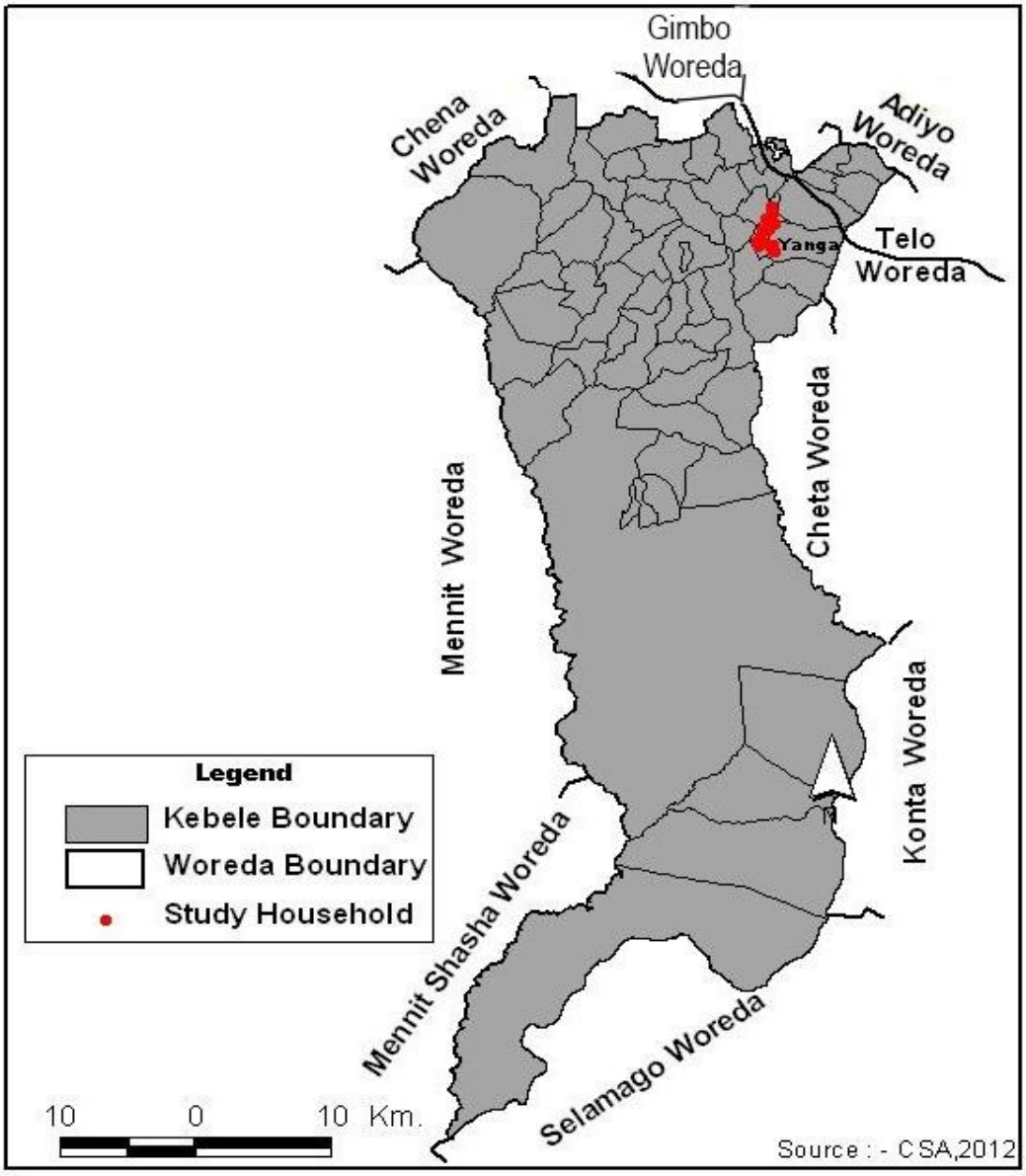
10.1. The Kafecho

In the next parts of this chapter, I chart out the processing and consumption of coffee in three districts of Kafa: Decha, Adiyo and Gimbo. Accordingly, accent is given to the documentation of material culture relating the processing of coffee and the consumption of the beverage. Prior to the discussion on the subject, I have to reiterate the fact that the households studied in the district of Adiyo lie in a non-coffee growing agro-ecological zone while those in Decha and Gimbo are inhabited by coffee growing farmers. For the purpose of clarity, there is a need to underscore the homogeneous nature in the types of materials used during the processing of coffee at the pre-consumption stage, whereas there is a palpable disparity in the use of cultural materials pertaining to the consumption of the beverage. Ethnoarchaeological data from the area confirm that the use of bamboo (*shinato/shinaato*)[126] made coffee cups*, tinjano* (*dollo*),[127] persist among the Kafecho notwithstanding the slight disparities observed amidst households. A total absence of a *tinjano* is a rarity although its predominance in Boqa locality of the district of Adiyo is very striking. As in other parts of Ethiopia, the coffee pot (*bune-qondo/bunee-qondoo*) is a rather symbolic artifact essential in the coffee ceremony. Although the Kafecho use coffee pots incised with a variety of decorations, they

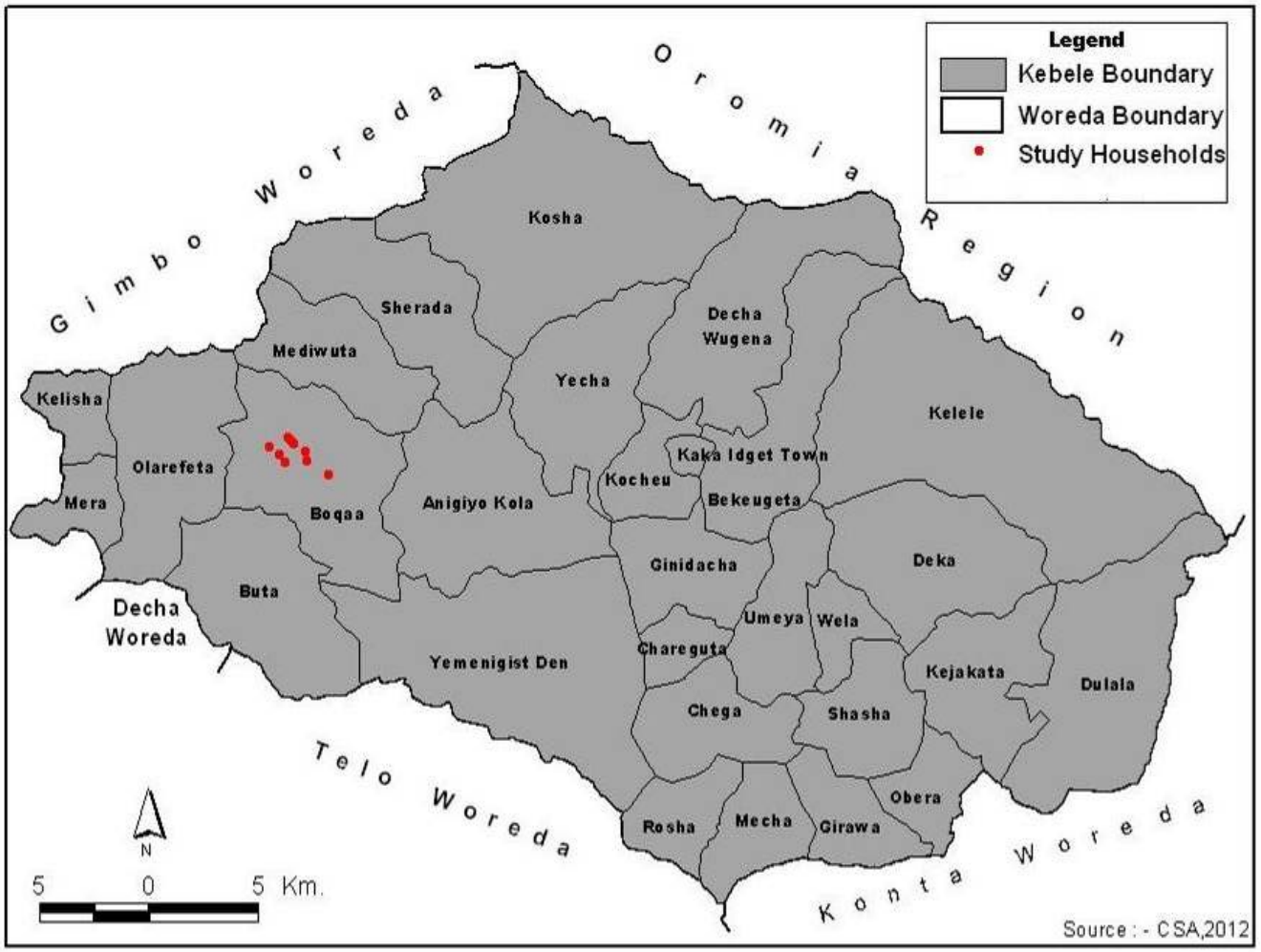
[126] Bamboo grows in abundance in Adiyo and Decha districts of Kafa where it is employed for construction mainly of houses and doors called *kakelo* (*kaakeelo*) and the production of coffee mugs known as *tinjano* (*dollo*) and a bigger cup*, täṗelo*(*taphaloo*)*,* used to drink water or a local drink called *borde*(*bordee*). Despite the beginning of the use of Chinese ceramic products, the *tinjano* has remained an emblematic artifact in coffee consumption among the Kafecho and its use is conventionally dated back to the kingdom period.

[127] The *tinjano* has a higher resistance to heat compared to the latter, and hence can preserve the warmth of coffee. Although it is commonly used in all parts of the study areas in Kafa, the production and the magnitude of use is rather conspicuous in the highlands particularly in Boqa locality of the district of Adiyo, where bamboo is widely used both in the production of other utensils and in construction.

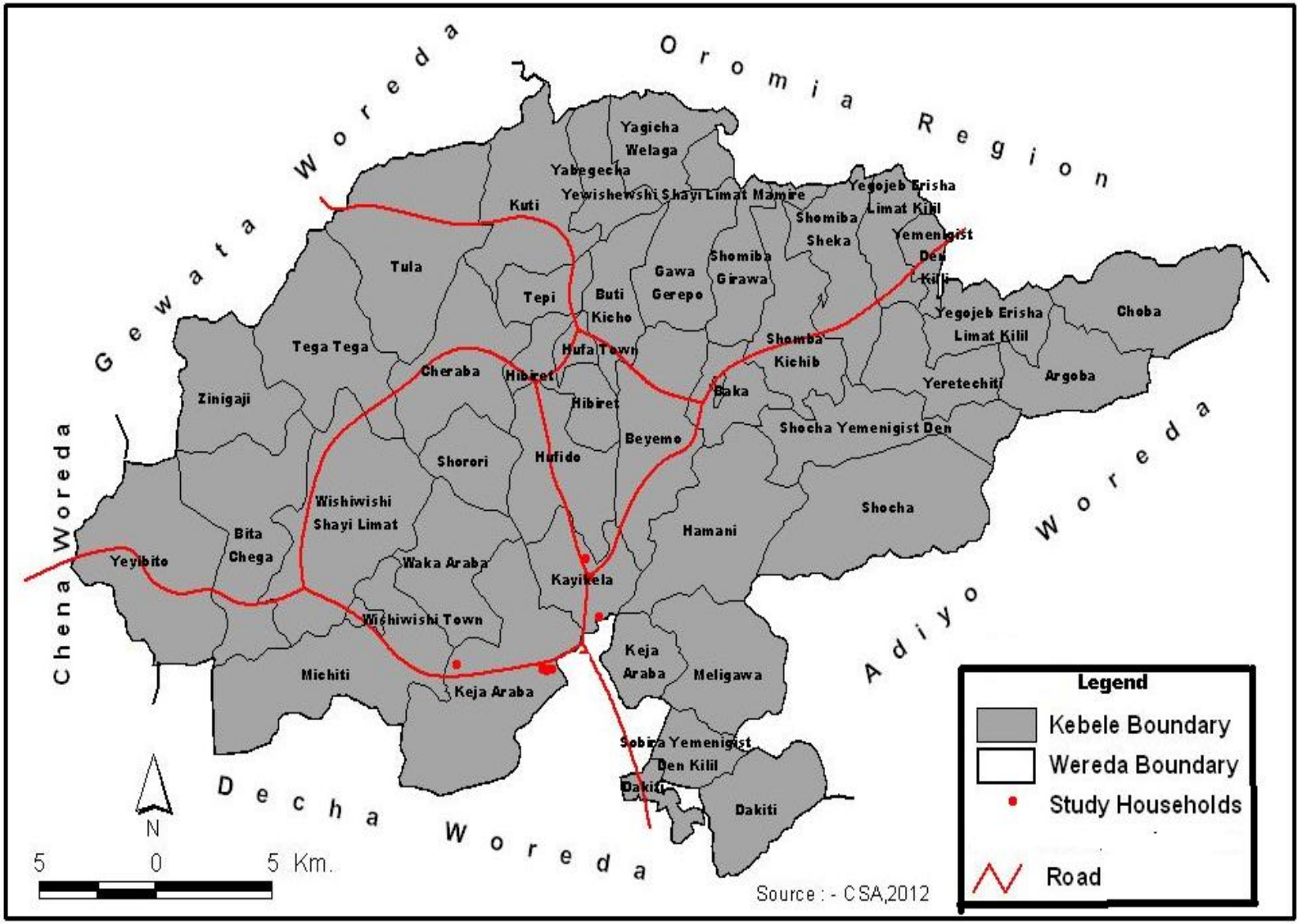
consider spoutless coffee pots as emblematic artifact of the area used since the indefinite past. The beverage buttresses relations between households of the same neighborhood. It is also an important drink employed in social gatherings and rituals, the details of which are presented under the section dealing with the values of coffee. The following maps show the households studied in the three districts of Kafa.



Map 10.1. Kafecho households in Mankira locality, Decha.



Map 10.2. Kafecho households in Boqa locality, Adiyo.



Map 10.3. Kafecho households at Kaya-Kelo and Qäja-Araba localities, Gimbo.

10.1.1. Material Culture in the Processing and Consumption of Coffee

The array of vernacular materials used in the processing and consumption of coffee in southwestern Ethiopia fall into three broad categories: ordinary materials made by non-craft women at home, wooden cultural materials produced by carpenters and pottery products. The basic enquiry relating who produces what is addressed in the subsequent parts of the chapter. Here, I first present a synopsis of the types of materials used in the processing and the consumption of the beverage and then put a special emphasis on the details of the production of coffee-related pots in the next chapter.

Cultural materials used in the processing and consumption of coffee fall into three broad categories: wooden materials used at the processing and consumption stage (*shurko/shurkoo*-coffee roasting stick, *tinjano*-coffee cup made of calabash*,* mortar and pestle), earthenware used for roasting coffee beans, boiling and consuming the beverage (coffee pots, *kari* pots known as *kebet-karionk* and *kebet-siďanonk*, and *kari* cups- *mätägoy*).

While coffee pots[128] and coffee roasting-griddle, often about 50 cm in diameter, constitute the common cultural materials essential in the preparation of coffee, two globular pots known as *kebet-karionk* and *kebet-siďanonk* are only used by the Majangir in the preparation and consumption of *kari.* Coffee cups made of bamboo (*tinjano*), clay (*mätägoy*) and calabash (*qulu*) are used by the Kafecho, the Majangir and the Oromo of Jimma correspondingly. Unlike the Kafecho and the Oromo, the Majangir are the only group of people who still use a whole set of clay materials in the processing and consumption of *kari*. In spite of the use of Chinese cups (*bune-sinno/bunee-siinoo*) in the consumption of coffee, the Kafecho have for the most part, continued using *tinjano* whereas the calabash-made cup, *qulu,* is rarely used by the Oromo alongside with Chinese cups locally known as *shinni/shinnii*-a cognate term for the Kafecho *bune-sinno* and the Amharic *sinni*.

The artisanship of making *tinjano* is a male specialty. The production of these mugs requires the machete (*gäjäro*), an iconic artifact of the coffee growing regions of southwest Ethiopia, employed to fell bamboo trees from the forest, cut the tree into pieces of logs and during the production stage, particularly in shaping

[128]Despite the noticeable variations in the use of terms for coffee pots among the different ethnic groups in Ethiopia, the common name for coffee pots- *jäbäna*- and its shape shows Arabic influence (Pankhurst 1997:524).

the base, trimming the mouth and decorating the basal section of the cup. Artisans also use bayonets to polish the interior surface, and thus to make it smoother. According to an artisan from Adiyo, one can produce a hundred and fifty *tinjano* per day. The Kafecho boil the *tinjano*[129] for about two hours to enhance its strength and beauty before use.

Figure 10.1. The production of *tinjano* at Boqa, Adiyo.

Akin to the cultivation of coffee, the preparation and consumption of the beverage necessitates the use of a range of materials. The *gäfeto* (*gafeetoo*) a wooden bowl used in the processing of coffee principally in separating the coffee beans from the pulp and in washing beans before roasting, is mostly made from *qäräro* (*Aningera altissima*), *wanza* (*Cordia africana*) and *gätäma/gatammaa* (*Schefflera abyssinica*) trees (see the scientific names of these trees in Fichtl and Admasu 1994).

[129] There is a conspicuous variation in terms of the price given to decorated and undecorated *tinjanos.* Accordingly, a decorated *tinjano* is sold for five birr while undecorated *tinjano* costs only one birr.

Figure 10.2. A bowl shaped *gäfeto* with a handle (top). A four-legged *gäfeto* (bottom) serving as a coffee-tray (*tinjano-koto/ tiinjaano-kotoo*).

Two other wooden materials, the mortar (*bune-boto/ bunee-botoo* or *bune-botonde/bunee-botoondee*) and the wooden pestle (*boti-busho/botii-bushoo* or *bote-busho/bootee-bushoo*) are employed in pounding roasted coffee beans. Apart from the production and use of *gäfeto,* a wooden-tray known as *tinjano-koto* (also called *tinjano-mädo/ tinjaano-madoo*) is used to carry the *tinjano* and Chinese-cups (*bune-sinno*) during and after a coffee ceremony. Men make these wooden materials while women prepare *shurko* (also called *bune-shurko*): a coffee roasting stick prepared from a stalk of *zämbaba* (*Phoenix reclinata*) tree and *bune-qedo*(*bunee-qeedo*), a ring-like stand of a coffee pot (*bune-qondo/bunee-qondoo*) from *wälo*(*waloo*), leaves of *ensät* or banana tree, or sometimes from mud painted with animal dung.

Figure 10.3. Top: a mortar (*bune-boto*). Bottom: a pestle (*boti-busho*).

Figure 10.4. A coffee-tray (*tinjano-koto).*

Figure 10.5. A woman making a ring stand (*bune-qedo*) for a coffee pot.

Figure 10.6. *Bune-qedos: Bune-qedo* made from leaves of *ensät* or banana (top) and *bune-qedo* made of mud painted with animal dung (bottom).

Three pottery products, coffee roasting-griddle (*bune-midado/bunee-midaado*)[130] coffee pot (*bune-qondo*)[131]and incense burner (*gocho/gochoo*), are purchased from Mänjo, Manno and Mäniyo potters in weekly markets held at Mankira in Decha and Mära in Adiyo. In the preparation of coffee, the Kafecho use both coffee pots with spout and without spout, although the people generally consider spoutless coffee pots as a typical cultural artifact associated with coffee consumption in the area.

[130] Apart from roasting coffee and cereals, *bune-midado* is used also to bake varieties of bread prepared from cereals chiefly wheat and corn, and *qoco,* bread prepared from *ensät*.

[131] Milk or flour of *ɪef* is boiled along with incense to change the odor of a new coffee pot. When it boils, it overflows on the pot after which the coffee pot is ready for use. Altering the smell of the pot is possible by using residue from morning coffee, which is rebuild twice or trice until the odor of the pot changes.

It should, however, be noted, that spoutless coffee pots are produced and used in and outside Ethiopia. For example, the Abada[132] pastoralists in Eastern deserts of Egypt make use of spoutless coffee pots, also called *djäbäna* by the Abada (figure 23.6 in Wendrich 2008: 520), similar in type with men made spoutless coffee pots of the Bertha along the Sudanese-Ethiopian borderland (see figures 4.12 and 4.13 in González-Ruibal 2014: 212,214). Some decorated spoutless coffee pots of Tigray exhibit similarities with those of the Bertha although the *chaîne operatoire* and surface treatments during the production stage cannot be described here with certainty. Spoutless coffee pots produced by Oromized Yäma in Jimma vicinity, though primarily used in ritual practices, fall under the same typology.

Figure 10.7. *Bune-midado* and *bune-shurko.*

[132] The Abada nomads live in southern parts of the Eastern desert between the Nile Valley and the Red Sea in Egypt (Wendrich 2008:508).

Figure 10.8. From left to right: Spoutless coffee pot, Kafa and spouted coffee pot, Gomma.

Figure 10.9. A spoutless Bertha coffee pot from Asosa. Photographed at Coce-Lämi, Gomma.

Figure 10.10. Spoutless coffee pots from Tigray (Institute of Ethiopian Studies Museum, Addis Ababa University.)

Figure 10.11. A 20th century spoutless coffee pot from the Hadendowa, Beja people from the Kassala region of Sudan (*Musée d'ethnographie*, Genève 2015).

There is a striking typological similarity between coffee pots of people living along the Sudanese-Ethiopian frontier. The resemblance is more pronounced among the Bertha in western Ethiopia and the Beja in northeast Sudan. The production and use of similar coffee pots in northern and southwestern Ethiopia is, conceivably, a result of the longstanding contacts along the Sudanese plains and the valleys of the Nile and its tributaries. This further strengthens Pankhurst's (1997:524) view that the name for coffee pots, *jäbäna,* and its shape shows a strong Arabic influence.

In some Kafecho households, one can find both types of pots while it is common to find either unless a household uses an iron can as a substitute for a broken coffee pot. It is, thus, unusual to find a household without a coffee pot. Big coffee pots are used during big gatherings such as feasts, holidays and post funeral gatherings in the house of the family of a deceased person. In rare cases, it is possible to find an iron can used in the preparation of coffee although there is a general belief that coffee prepared in coffee pots is more delectable than one prepared in an iron can.

Figure 10.12. An iron can used in boiling coffee.

There is disparity in terms of places preferred to store pottery products used in the preparation of coffee. The coffee roasting-griddle (*bune-midado*) is often placed nearby a hearth (*gemmo/gemmoo)*. In most households, coffee pots are set nearby a hearth where the floor is dry or suspended on *ɔangiyo* (*caangiyoo*)*,* wooden structures supporting the interior of the roof. The coffee pots are untied, and used during the preparation of coffee and suspended again. It is possible to surmise that there is an advantage in hanging coffee pots on the roof as it minimizes the rate of breakage.

Likewise, there is variability in the position of incense burners (*gocho*). In some households, there is a striking association between an incense burner and the central pillar (*gimbo*), where incense is burnt during the coffee ceremony and other occasions. In other households, the incense burner is placed nearby a hearth along with other pottery products or at one end of a living room. In some cases, however, there might not even be an incense burner but a broken piece of pot particularly the basal part of *bune-qondo* or of *bune- midado*.

Figure 10.13. A coffee pot suspended on wooden structure of a roof (*cangiyo/caangiyoo*), Boqa.

Figure 10.14. An incense burner (*gocho),* Mankira locality.

10.1.2. Coffee Processing and Consumption

The preparation and consumption of coffee (*buno*) among the Kafecho involves processing of dry coffee beans to separate the beans from the hull. In what the people call y*iqo* (*yiqoo*), dry processing method in which dry coffee beans are separated from the hulls either by pounding cherries employing a wooden mortar (*bune-boto*) and pestle (*boti-busho/bote-busho*) or by grinding the beans using a basaltic pebble locally known as *ɪaqo*(*xaaqoo*). In the first method, women pound unprocessed dry cherries in *bune-boto* in which case a single or two individuals slot-in and eject their *boti-busho* one after another. In the overall process of separating the hull from the beans by pounding, *mogoco* (*mogocoo*), young boys could help women the thumping process, although women often do most of the work. In the second method of processing coffee, women drudge the cherries on a mat *sälen,* a mat made of *zämbaba* tree (i.e. *Phoenix reclinata*) or a piece of sack by rolling the *ɪaqo* forth and back following which the hull is removed.

Figure 10.15. Pounding using pestle and mortar (left).Grinding with *ṭaqo* (right).

Regrinding could follow to separate the remaining coffee cherries from the pulp. Some Kafecho households of the Boqa locality in the district of Adiyo use grinding stones to separate the bean from the hull. For the process of winnowing (*hugo*/*hugoo*), it is often common to use either *gäfeto* or *gemo* (*gemoo*), a tray made from liana locally known as *pio*. Hand picking is the next step aimed at removing unnecessary components of the processed beans, chiefly black and rotten cherries. Then, the beans are washed on the *gäfeto* twice or trice until they are clean. In the former method, after the first round *mogoco*, the process of winnowing is accomplished using *gemo*. If there is a need to have a second or even a third round *mogoco* to clean berries, repeating the same process is obligatory. Winnowing, accompanied by handpicking, helps to remove broken cherries and dust. Eventually, the hull from the bean is discarded in farmlands or in homegardens thereby adding fertility to the soil.

Figure 10.16. Winnowing coffee beans using *gemo* (left), and cleaned coffee beans on a *gäfeto* (right), Mankira.

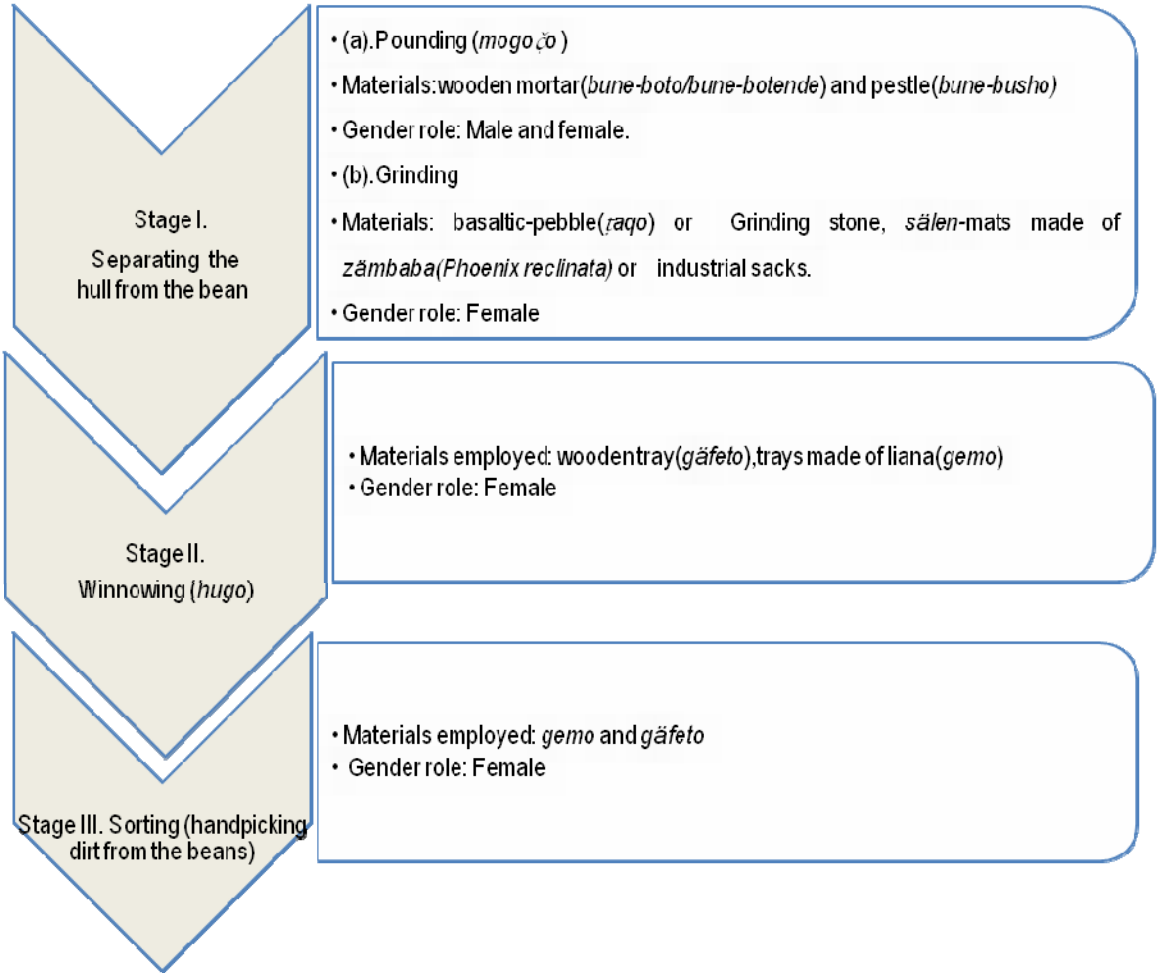


Figure 10.17. Summary of the stages in the processing of coffee, Kafa.

For the Kafecho, drinking coffee is an important, almost ceremonial activity on a daily basis. It is chiefly connected with basic hospitality, but also prepared when meetings for reconciliation are held, or during a break after a tiresome work. The ability to prepare coffee is part of the criteria for a woman to qualify for marriage, which shows the importance of the consumption of the drink among the Kafecho. Women, as in other parts of Ethiopia, take the responsibility of presiding over a coffee ceremony. Accordingly, a woman first washes coffee beans until they are clean and then toasts them on the coffee roasting-griddle (*bune-midado*) using *bune-shurko* made for that purpose. Then, the roasted coffee beans are collected on the *gäfeto,* which is circulated in the house to relish its aroma. People wave their hands as if to grab the aroma. *Šiqo* (*shiiqoo*) is the Kafecho term referring to the process of smelling the pleasant aroma of roasted coffee. Pounding coffee (*bune-koyo/buunee-koyoo*) takes place after the roasted coffee cools down using the wooden mortar (*bune-botende*) and pestle (*bune-boti-busho*) which crushes the beans into coffee powder.

In some households, women add salt on roasted coffee ready for grinding, which would make mixing salt[133] in the process of boiling much easier. Some individuals, however, prepare a mixture of coffee and salt in a *tinjano* or *bune-sinno* from which pouring the admixture of the beverage and salt for those in need becomes easier. The crushed coffee inside the mortar is placed on leaves of *ensät* (*wälo*) and is carefully guided into the narrow opening the coffee pot (*bune-qondo*) containing hot water. A small bung of corncob, wrapped *ensät* leaves or a wooden cap is stuffed in the opening as a strainer.

Figure 10.18. Roasted coffee beans ready for *šiqo*- smelling of the aroma(left) and pulverized coffee(right).

Akin to most hardcore coffee drinkers in Ethiopia, for many Kafecho households, a day does not begin without coffee. Morning coffee is often accompanied by a prayer (*ɔoroto/corotoo*) of the head of a family. In some cases, the head of the family pours coffee full of a *tinjano* from the first round coffee (*inde-buno/indee-bunoo)* in front of the entrance of a house to thank God (*Yäro*) for providing the family with coffee, and as means of pleading Him to bless the day. Then, coffee is consumed in the presence of family members and neighbors.

[133] Note should be made that not everybody drinks salt-spiced coffee.

Consuming coffee two to three times a day is a common ritual in Kafa. Every morning and afternoon, even during evening, a Kafecho family prepares coffee and shares it with neighbors. In the morning hours of the day (7:30-9:00 am), it is familiar to see households in which people from a closer neighborhood gather to share coffee. A strong spicy coffee is served with toasted grains or bread. People attending the coffee ceremony grip a handful of the roasted grain and a loaf of bread and would eat before drinking a cup of coffee. Any food accompanying the coffee ceremony is known as *shafiro* (*shaafiroo*). Sharing coffee with neighbors is cyclical in that households prepare the drink one after another. Proximity between households, though not the sole factor, is a major reason that decides who shares coffee with a household.

Figure 10.19. Coffee ceremony at Mankira.
(Notice the use of *tinjano* and Chinese cups, *bune-sinno*).

In rural Kafecho households, only the first round (*inde-buno)* and the second round of coffee (*cambo*/*caamboo*) are served. The Kafecho often use the term *šico* (*shiicoo*)[134] to refer to the residue left after the consumption of coffee. It is also customary for the people attending the coffee ceremony to convey words of praise received by the woman serving coffee. The words of blessings I gathered are very much alike and have important communal elements of thanking God and pleading Him to bless the family hosting the coffee ceremony with abundance in coffee, children and all forms of fortune. In the argot of the Kafecho in the study areas, the most frequent words of gratification after coffee consumption go like this:

Yarii imbaa!	Let God provide you!
Diigoon imbee!	Let peace be with you!
Yari baraakibee!	Let God bless you!
Bunoo mucaa'e!	Let you not be without coffee!
Bushoo mucaa'e!	Let you not be without a child!
Bunee maraako-imbee!	Let the angel of coffee provide you!
Bunoo bushoono mucaa ayootee!	Let you not be without coffee and a child!

In the above words of praise, coffee is highly valued and consequently, equated with a child- one of the things that every Kafecho family would like to have. However, it has to be borne in mind that the consumption of coffee among the people is part of the daily habitus with which a range of cultural fabrics are interwoven: food consumption, social events, feasts and rituals. Coffee consumption in the morning, noon and evening times of the day also coincides with the three commonly accepted mealtimes of a day.

[134] In some cases, š*ico* of coffee is used as fodder for sheep although many people discard it as waste.

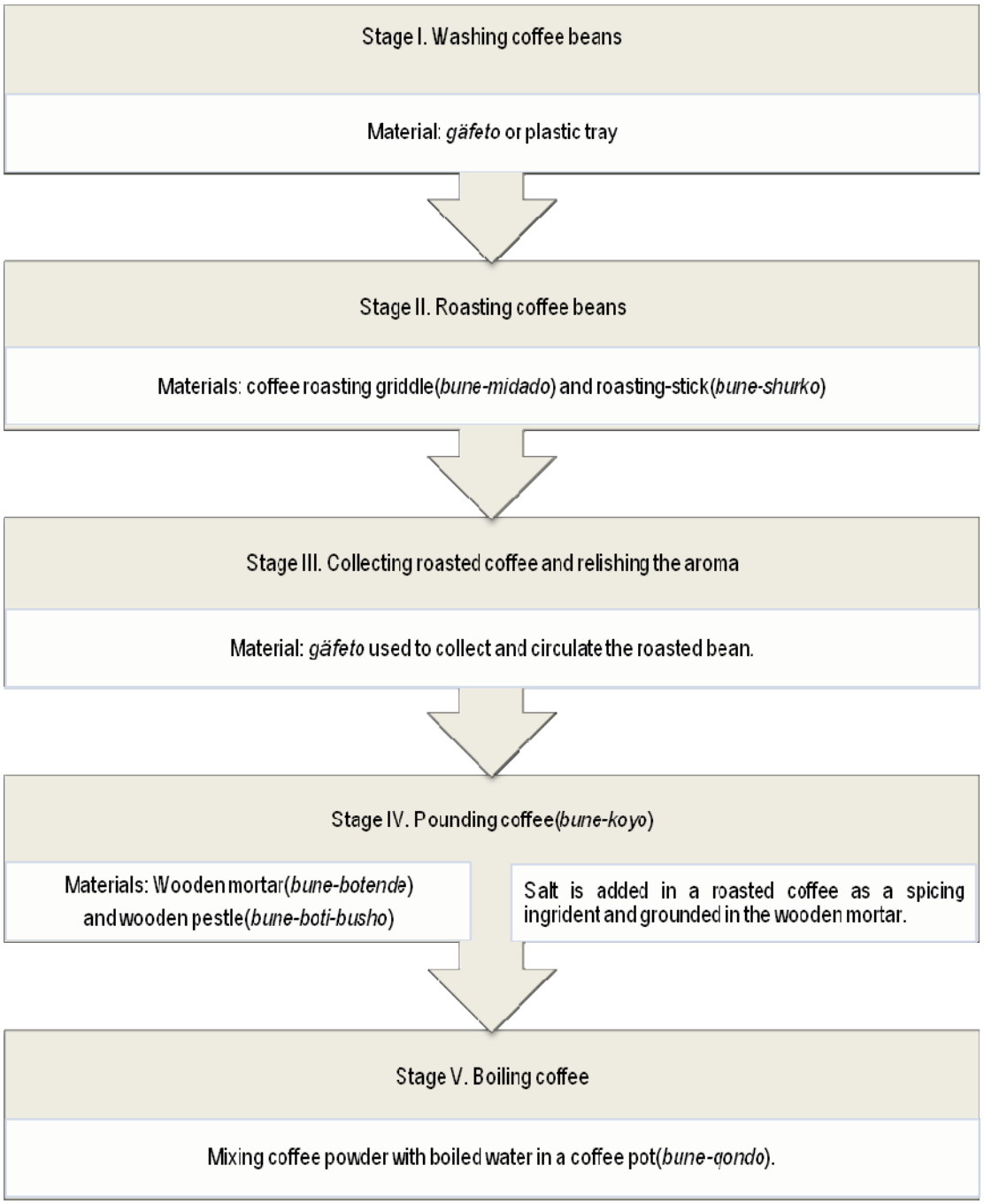
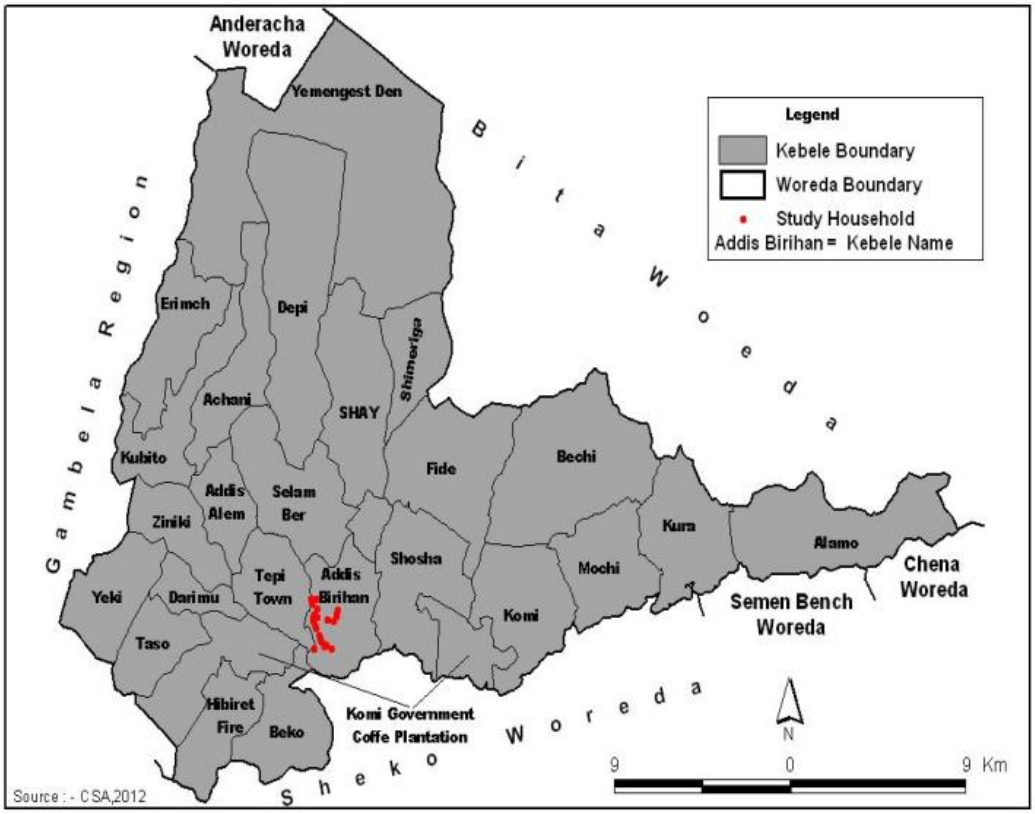


Figure 10.20. Summary of the operational sequences in the preparation of coffee, Kafa.

10.2. The Majangir

Unlike the Kafecho and the Oromo, the Majangir are typically associated with the consumption of *kari*, an infusion prepared from coffee leaves with a mixture of other spicy ingredients. Oral traditions have it that the preparation and the consumption of *kari* was known since the time out of memory. According to my informants, "coffee beans were not consumed by the Majangir in older days." The recency of the introduction to the consumption of the decoction prepared from coffee beans can be surmised from the works of Jack Stauder (1968;1971), who does not refer to its consumption but only of *kari*. The preparation and consumption of the drink from wild coffee leaves have also been attested in the work of Stauder. However, he made no mention of the preparation stages of the infusion except providing a sketchy picture of the social value of the drink emphasizing that *kari* drank in the morning was used as a means of bolstering relations between adjacent homesteads. Even after the beginning of preparing and consuming the decoction from coffee beans, *kari* continues to be the drink held in most affection. Accordingly, it is frequently consumed in a fashion unchanged both in the methods employed during its preparation and its socio-cultural significance. In the ethnographic context, therefore, the consumption of the beans among the Majangir is only minimal and secondary.

Kari, known as *ɔemo* among non-Majang people consuming the drink is also prepared, and consumed by people living in parts of Shäka, Kafa and Bench-Maji zones of Southern Nations, Nationalities and Nationalities and People's Region (SNNPR) (see Yitayal and Achame 2014). The term *ɔemo*, albeit rarely, is also in use among the Majangir themselves, particularly the young. Regardless of this anomaly, however, I will consistently employ *kari* throughout the discussion on the subject. In the forthcoming parts of this chapter, I will bring in the materials used in the preparation and consumption of *kari* and present details of the stages in the preparation of the infusion and its wide-ranging values.



Map 10.4. Majang households at Goji, southeast of Teppi.

10.2.1. Materials in Preparation and Consumption of ***Kari***

In the preparation and consumption of *kari,* the Majangir employ two major categories of materials*:* pottery and plant products. Two types of pots, *kebet-karionk* and *kebet-siďanonk,* are used during boiling and distillation of the infusion correspondingly. Besides, clay cups called *mätägoy* are crucial at the consumption stage. The Majangir buy[135] these pottery products either from potters selling these products in the market of Teppi and the town of Meti in Gambela Regional State, or from potters living in the nearest homestead. One could also secure these pots from relatives in Majangirland as a gift. Both *kebet-karionk* and *kebet-siďanonk* present a strong morphological similarity in that they are globular shaped containers. Their difference lies on their size and function. In most cases, *kebet-karionk* is bigger in size and it is used

[135] There is a conspicuous variation in the price given to pots used in the preparation and consumption of *kari* depending on quality and size of the products. Customarily, the price increases in winter due to potters' presumption that farmers have enough money to pay for as a result of yield from coffee cultivation. Accordingly, *kebet-karionk* and *kebet-siďanonk* are sold for twelve and six birr correspondingly. A *mätäge* is sold between two and five birr though its price is largely controlled by its quality and size.

to boil *kari,* where as *kebet-sid'anonk*, habitually used as a container of distilled *kari,* is relatively smaller in size although one could come across *kebet-sid'anonk* as big as *kebet-karionk.* For details on the size of the volume of pots used in the preparation of *kari,* refer to the annex attached at the end of the dissertation. The morphological and functional aspects of these pottery products and the details on the technology and typology of these pots is the concern of chapter eleven. Other than the primary use of *kebet-karionk* and *kebet-sid'anonk* in the preparation of *kari,* the Majangir also make use of them for a variety of purposes: both are used to store and boil water while *kebet-karionk* is mostly utilized for cooking tubers (locally known as *kächi/kachii* and *kawen/kaawen*), boiling cabbage and cereals, mainly corn.

Figure 10.21. *Kebet-karionk* (left) and *kebet-sid'anonk* (right) used in the preparation of *kari.*

Mätäge, a clay cup primarily employed to drink *kari,* can also be used in boiling pepper to spice the drink. Even after the recent acquaintance of the Majangir with the drinking of coffee prepared from beans, *mätäge*'s connection with the ancient drink has remained considerable and emblematic.

Figure 10.22. *Mätäge*- a clay cup used in the consumption of *kari.*

Three other non-pottery products- *sote* (*sotee*)*, gote* (*gotee*) and *gäbätoy* (*gabatooy*) - are used at different stages in the preparation and consumption of *kari. Sote*[136] is a filtering funnel woven from a tree climbing annual herb locally called *pïğoy* often made by elderly men who has kept the skills to date. It is neither regularly available in the markets like pottery products nor produced in large numbers. Thus, its production is intervallic since it is made when need arises.

Figure 10.23. *Mätägoy*, *sote* and *gäbätoy* - three non-industrial artifacts used in the processing and consumption of *kari*.

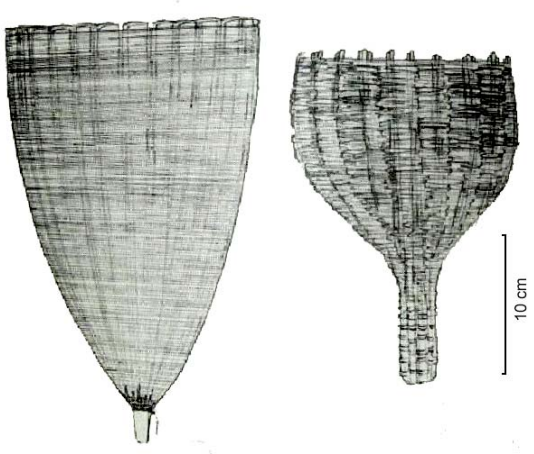


Figure 10.24. Two beer filters: Gumuz (left) and Bertha (right) comparable to the *sote* used to filter *kari* (Adopted from González-Ruibal 2014:114).

[136] The price of *sote* varies depending on its size though it is mostly sold at an average price of ten birr.

As seen in figure 10.24, there is an interesting analogy between the *sote*, used for filtering *kari*, and the beer filters, which are widespread among the indigenous peoples of the Sudanese-Ethiopian borderland (for example, the Gumuz and the Bertha). This might be attributed to the fact that the coffee plays a similar social role to beer in these communities. The Majangir also make use of calabash to make *gotë* (*gotee*) - a ladle-like utensil used to pour distilled *kari* from *kebet-sid'anonk* to *mätägoy. Gäbätoy,* employed in harvesting and other utilitarian uses at household level, is a wooden tray to serve *kari.* This wooden tray, as we shall see in the subsequent section of this topic, is also used for various purposes during the preparation of the infusion. The number of *kebet-karionk* and *kebet-sid'anonk* shows a significant similarity at household levels. It is common to find each of these pots although there are households with more than one of each, or either of these pots. There is, however, a noticeable discrepancy in the number of *mätäge* in households regardless of family size. Accordingly, one can find more *mätägoy* in a household with a small family size. Since drinking *kari* is common custom among the Majangir, the presence of a large number of these clay cups in a small sized family is not astounding.

10.2.2. Stages in the Preparation of ***Kari***

As in most parts of Ethiopia, women among the Majangir take the responsibility to prepare and serve *kari* although men can sometimes fetch leaves of coffee (known as *we'en-kariok/we'een-kaariook* or *we'en-mo'eko/we'een-moo'ekoo*) used to prepare the infusion. The Majang term, *kari,* is also used to refer to both the coffee leaves used in the preparation of the infusion and the infusion itself. Nonetheless, for the purpose of clarity, I consistently use *we'en-kariok* to mean the leaves and *kari* to refer to charred coffee leaves and the drink. The preparation of *kari* is a typical duty of the women although men[137] can assist in time of sickness or birth, especially when neighbors travel away from the village and when no one is around to prepare the drink. In some instances, however, men, if bachelors or divorced, can by themselves prepare and consume the drink.

For the preparation of *kari,* women prefer strong and green coffee leaves (*we'en-kariok*) to raw and variegated ones. The bundles of leaves are provisionally stored at a backyard of a house and soon after, they are charred. Some women prepare *kari* instantly after getting the leaves from the coffee trees while others prefer to char the leaves with a low-flame fire on a hearth (*koytak*) set usually within a compound or

[137] Some Majang elderly remember that men used to gather *kari* from the forest in the past although women can easily get it from homegardens in the present.

in a fireplace under a *palle* and store them for future use. Storing wet coffee leaves (*we'en-kariok)* on a *palle* is generally, viewed as advantageous for it avoids wilting and damage from insects due to exposure to smoke and heat from the hearth under the *palle.*

Figure 10.25. A Majang woman transporting coffee leaves (*we'en-kariok)* for preparing *kari* while fetching wood.

Figure 10.26. Coffee leaves (*we'en kariok)* stored on *palle.*

Figure 10.27. The process of blazing *we'en kariok:* A) Initial blazing, B) Charring *we'en kariok* with stalk of coffee, and C) Scorched coffee leaves (*kari*).

During the preparation of *kari*, women set fire at a fireplace in a living room or compound. The first step is scorching *we'en-kariok* on fire from the hearth (see figure 10.27a and b), and consequently, the color of the leaves turns dark brown. Then, the leaves are detached from the twigs, known as *ket-karionk* (*keet-kaarionk*), by hand and are placed on a *gäbätoy*. Wet as they are, the *ket-karionk* is kept alone for future use in order to char fresh coffee leaves up on preparing the drink. The *ket-karionk* of a formerly used coffee leaves is, thus, employed in further charring the blazed coffee leaves collected on the *gäbätoy.* During this second round charring, the woman in charge of preparing *kari* first sets fire on the *ket-karionk,* and chars the *kari* on the *gäbätoy* by dipping the *ket-karionk* and rotating it on the *gäbätoy*. At the end, charred coffee leaves are all set to prepare the infusion (see figure 10.27).

When the process of charring coffee leaves (*we'en-kariok*) takes place, half of the *kebet-karionk* is filled with water for boiling. Then, scorched coffee leaves (*kari*) on the *gäbätoy* are mixed with the boiling water in the *kebet-karionk* resulting in a dark brown infusion up on boiling.

Figure 10.28. Left: Mixing charred coffee leaves on *gäbätoy* with boiling water in *kebet-karionk.*
Right: *kebet- sid'anonk*-a pot to distil *kari and gote*-a calabash made utensil. Both are used in the distillation of *kari*.

To flavor *kari*, the Majangir use such spicy ingredients as garlic, *jomu/jomuu* (*bäsobila*)[138] (*Salvia nilotica*), Herb of Grace, rue, locally known as *cadramoy/cadraamoy* (Amharic-*t'iena-addam* [139] *i.e. Ruta chalepensis L.*) *and mirmitak* (*mirmitaak*) or *mid'iyak* (*midhiyaak*)- a variety of pepper[140] (*Capsicum annuum L.*). Garlic and pepper (*mirmitak)* are processed before adding them to the infusion while *jomu* and *cädramoy* are mixed without further processing, as these plants are considered as natural spices and grow them in their compounds. In the forthcoming sub-sections, the process involved in setting up spices from these plants is presented.

Jaman and ***Giyan*** – Processing Garlic and Pepper (***mirmitak or mid'yak)***

Majang women preparing *kari* first remove the pulp from the upper part of bulbs of garlic and start grinding by hitting the bulbs using a small basaltic pebble known as *jämänonk* (*jamanoonk*). The term *jaman* (*jaamaan*) is used to refer to the process of grinding garlic bulbs on a wooden-chopping board or *gäbätoy*. Finally, the crushed garlic is mixed with the boiling *kari*. They also use pepper (*mirmitak*) obtained from *ket-mirmitako* (*keet-mirmitaako*) - a plant that grows wild especially around coffee farms and in homegardens to spice the drink. *Giyan* (*giyaan*) is the task of grinding the *mirmitak* using *giyanonk* (*giyaanoonk*) - a similar type of pebble used to perform the *jaman* on a broken pot called *d'äyen-mirmitakon* (*dhayen-mirmitaakoon*). The ground *mirmitak* is boiled separately in a *kari* cup (*mätäge*) to spice the *kari* during the consumption stage.

[138] It is a perennial herb growing in abundance between 1800 and 3800 masl chiefly in grassland meadows and along roadsides (Fichtl and Admasu 1994:121).

[139] This spicy plant widely grows in highlands above 1500 masl. It is used to flavor milk and cheese as well as stimulants such as coffee, tea, and *quɪi* (for the general characteristics of the plant and its ecology, see Fichtl and Admasu 1994:190).

[140] See the scientific name for chili, *Capsicum annum L.* in Fichtl and Admasu (1994:197) and Hedberg *et al.* (2006:148). The plant was probably indigenous to Central America, but spread rapidly in the 16th century to the rest of the world (Fichtl and Admasu 1994:197). It is the most important spice held in affection, and is used in cooking.

Figure 10.29. The *giyan* stage (left) and the *jaman* stage (right). Notice the pebble stone and the broken piece of pot (*d'äyen-mirmitakon*) used in the process.

Distillation (***Sid'an)***

The Majangir consume *kari* after distilling the crude infusion by boiling for about ten to fifteen minutes in the *kebet-karionk*. Three other essential ingredients, garlic, *cädramoy* (*t'ienaadam)*, and *jomu* (*bäsobila)* are added in *kebet-sid'anonk* nearby a hearth. Fetching crude *kari* from the *kebet-karionk* on the hearth to

Figure 10.30. Left: The distillation (s*id'an*) stage. Right: Pouring *kari* into a *mätäge*. Notice the filtering funnel (*sote*) and the *gote* used in pouring.

kebet-sid'anonk is done by pouring using *gote*. Up on pouring the infusion, a hand-woven filter funnel (*sote*) is set over *kebet-sid'anonk*. The Majangir use the term *sid'an* (*siidhaan*) to refer to the process of filtering *kari* as a result of which consumable *kari* is accumulated in *kebet-sid'anonk*. Distilling *kari* can also be done without the application of *gote* by fetching *kari* from *kebet-karionk* and pouring over *sote* manually by holding the handle or ear (*we'ena/wee'enaa*) of the *kebet-karionk* or holding the part below the mouth with two hands and pouring the crude infusion over the *sote* on which charred coffee leaves and other ingredients are accumulated. The filtered *kari* in the *kebet-sid'anonk* is then ready for consumption. *Kari* in the *kebet-sid'anonk* is further refined using *gote* and pouring it over a *sote* placed over each *mätäge*.

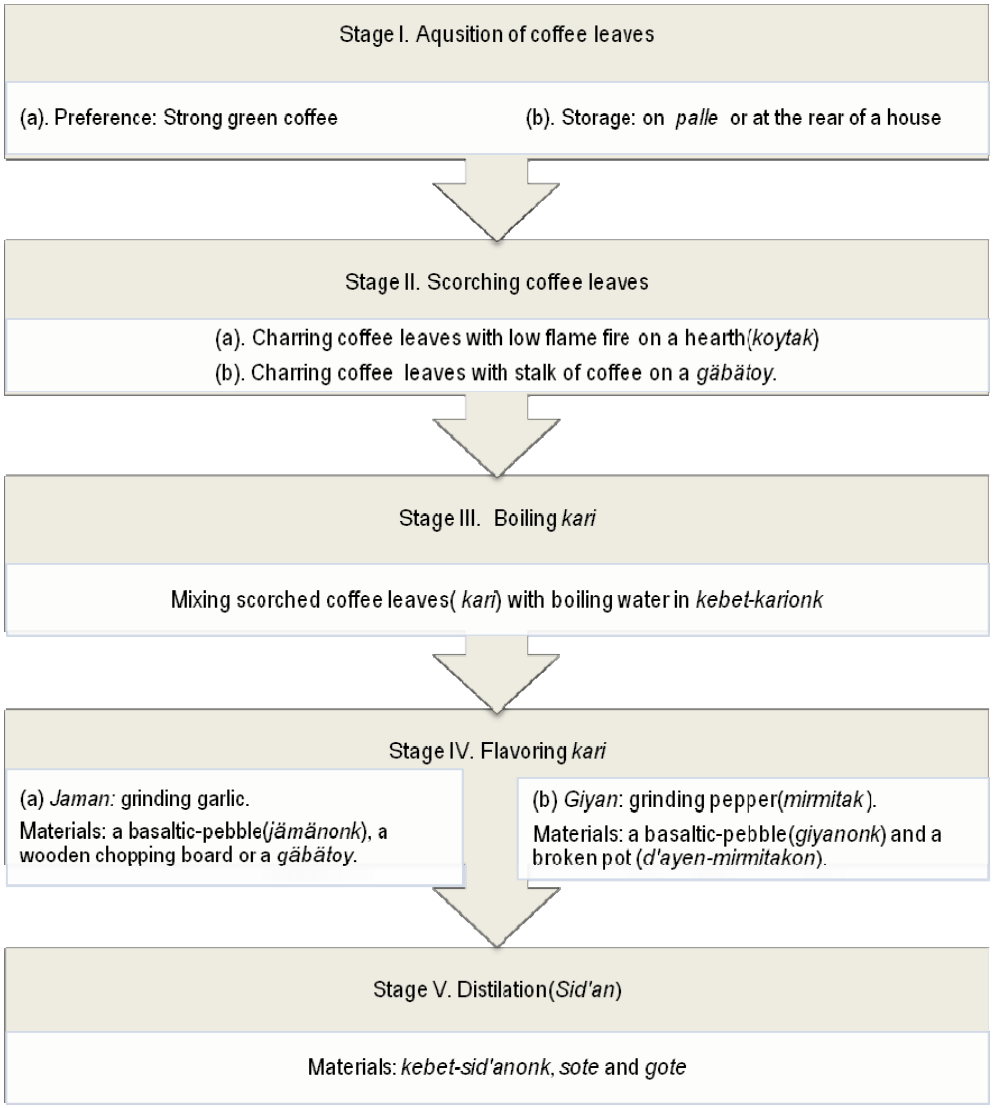


Figure 10.31. Summary of the operational sequences in the preparation of *kari*.

10.2.3. The Consumption of ***Kari***

A household preparing *kari* is often joined by family members, children above the age of eight, and normally by immediate neighbors, though any one passing by is welcomed to share the drink. It is also traditional to serve people drinking *kari* with loaves of *nasi* (*naasii*) -a variety of bread prepared from the fusion of corn and wheat flour. Tuber plants, known locally as *mitiyak* (*mitiyaak*) and *kächi* as well as roasted or boiled corn, can also be served alongside with *kari* at any time of the day. The Majangir use the term *ď'ämä-karion* (*dhama-kaariyoon*)[141] to refer to food served with the drink

Three Rounds of ***Kari***: O***d'owan***, ***Peyoy*** and ***Jitoy***

Some of the Majangir in the study area consume *kari* three times a day- in the morning, at noon or late]afternoon, and evening hours of the day. In most households, drinking *kari* twice a day is a common ritual. Under sunny environmental conditions and particularly in the afternoon, the drink is prepared and consumed in compounds under the shade of trees. In a single *kari* ceremony, three rounds of the drink are consumed. It should be clear to readers of this dissertation that a round refers to the *kari* served after a single boiling. Three rounds, therefore, represent three sequential moments of boiling the infusion in a single *kari* ceremony. The Majangir use three different appellations for each of these *kari* rounds: *oď'owan* (*odhowaan*) -first round, *peyoy* (*peyooy*) -second round and *jitoy* (*jiitooy*) -third round. A person served with *kari* from *oď'owan* can drink either with or without chili powder (*mirmitak or miď'iyak*). A second cup of *kari* from *oď'owan* is called *tukän* (*tuukan*) and many of the Majangir habitually drink both the first and the second cup of *kari* from the *oď'owan.*

Figure 10.32. Sharing *kari* in a Majang household at Goji.

[141] Its Amharic equivalent is *yäbuna qurs.* Some of the Majangir near Teppi use the term *qursi* (from Amharic *qurs)* referring to both the meal served during the coffee ceremony and the morning meal (breakfast).

While serving the *od'owan* from the *kebet-sid'anonk*, water is added into the *kebet-karionk* on the hearth to prepare the second round *kari*, *peyoy*. In most cases, the Majangir drink the first two rounds of *kari*: *od'owan* and *peyoy.* Though not recurrently, some individuals also consume *kari* from a third round (*jitoy*). There could be repeated boiling even after the third round depending on the number of people sharing *kari*. In cases when people are free, they tend to drink until the taste of the infusion gets dull. If need be, charred coffee leaves can be added into the *kebet-karionk* containing boiling water to produce a better quality *kari* that would be consumed instantly.

Wrapping up a coffee ceremony with words of praise is not a ritual restricted to the Kafecho and the Oromo. The Majangir also close up a *kari* ceremony with blessings. It is habitual among Majang elderly to sanctify the woman serving the beverage in a quite gracious way of praising individuals. The most extensively used blessing, "*inge-Wakot*" (*ingee-Waakot*), roughly translated as "let God provide you!" is vested by elderly men and women who simultaneously bow down to pay respect to the woman presiding over the ceremony and as a gesture of respect for the family too. However, not all of the *kari* prepared at a household might be consumed although that significantly depends on the number of people gathering to share the infusion. However, if it is shared among few people, there can still be distilled *kari* (*tältan/taltaan*) remaining in the *kebet-sid'anonk* which could later be re-boiled during the preparation of a new *kari* with scorched coffee leaves. Sometimes, *tältan* is reserved for members of a family, who could be at work in the farm or engaged in other activities away from residential areas. In this case, *tältan* is either kept in *kebet-sid'anonk*, or can be taken to an individual working in agricultural fields. The Majangir do not instantaneously dispose charred remains (*jäwänak/jawanaak*), but reboil it and consume the *kari*. After the conclusion of the *kari* ceremony, the *jäwänak* is discarded near coffee trees and vegetables grown within a compound.

Figure 10.33. *Jäwänak* – residue from *kari* at a disposal stage.

10.3. Coffee Processing and Consumption among the Jimma Oromo

Bunaa fi nagaa hindhabinaa

Coffee and peace cannot be done away

(Oromo proverb)

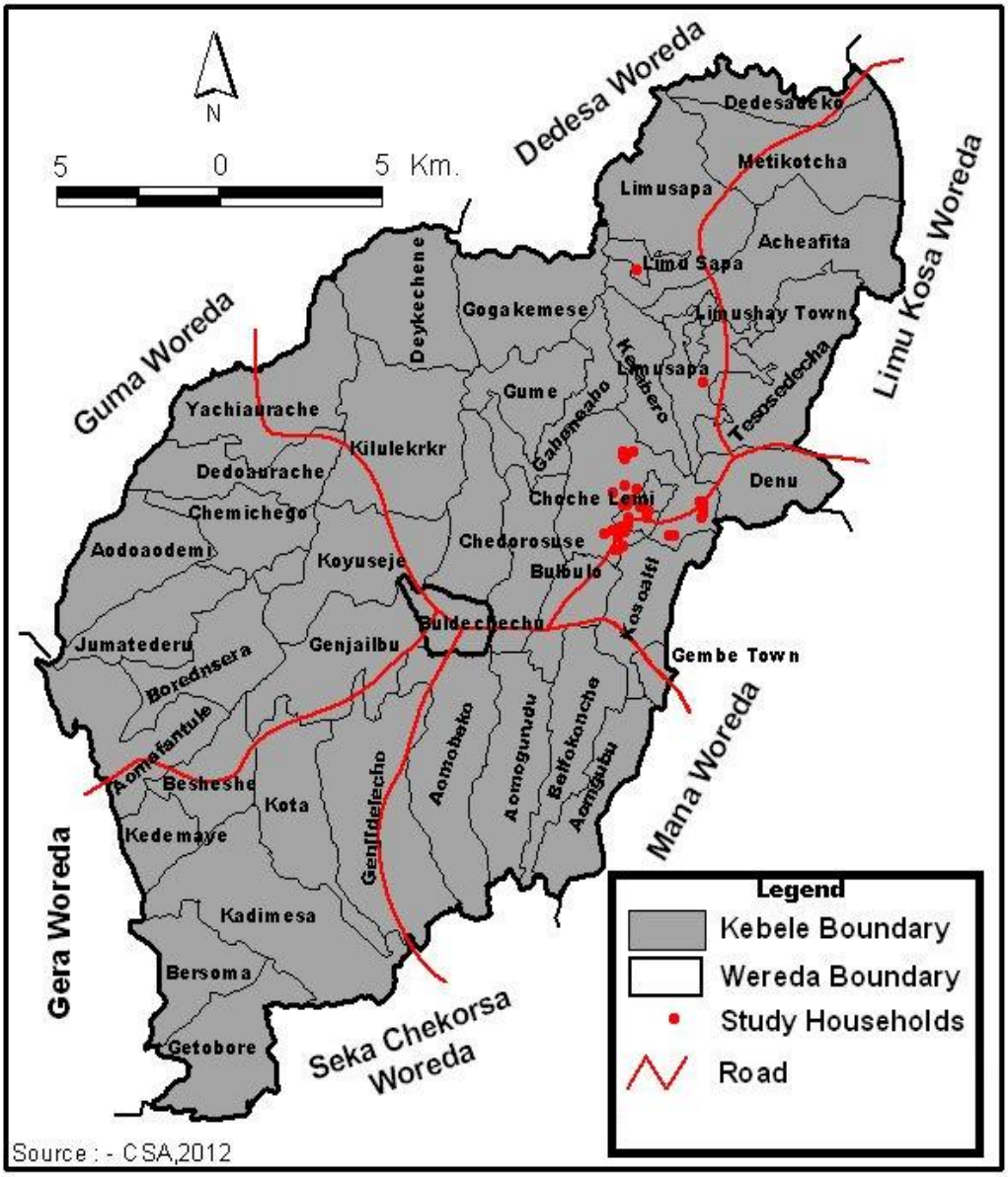
Akin to the Kafecho and the Majangir, the Oromo of Jimma have traditionally been linked to the cultivation and consumption of coffee. In the ethnographic present, coffee in Jimma is not just an item of trade, but it is very much related to the daily life of the people as its consumption is central in buttressing relations between neighbors; it is also one of the most vital plants often used in religious ceremonies and social events. One of the salient features in the consumption of coffee is the continuity in the tradition of coffee slaughtering, the *bunä-qäla,* prepared from roasted butter smeared edible coffee. Matchless as it is in the socio-cultural and economic life of the people, coffee is a highly valued plant held in affection among the Oromo in Gomma. This part of the chapter addresses two major areas, the details of the processing and consumption of coffee. A great deal of attention is given to the material culture associated with both constituents of the topic, and the multifarious ways in which the plant is utilized among the Oromo living at Coce-Lämi and Dalächo localities of Gomma, and among the Oromo and Oromized people of Yäma origin inhabiting the Molle locality in the outskirts of Jimma.

10.3.1. Material Culture

Like the Kafecho, the Majangir and other peoples of Ethiopia, the Oromo in what we today call Jimma zone predominantly use traditional products in the preparation and consumption of the plant. The only industrial product in use is the Chinese cup (*shinni*). Preparing coffee begins by toasting the beans on a coffee toasting griddle (*ele-bicu/elee-bicuu*), or a tin circular plate (*ele-sibila/elee-siibiilaa*). Note should, however, be made here that the latter is common in few of the households in the study areas. In the following paragraphs, a full description of the processing and consumption of coffee at household level is presented. The technology and typology of coffee pots is the concern of the next chapter of the dissertation.

Two principal materials used in coffee processing in Oromo households are the wooden mortar (*moyye/moyyee*) and the pestle (*bokku/bokkuu*) employed in pounding unprocessed dry coffee beans and *gundo,* a handmade tray used for winnowing and a variety of purposes at household level. While the

wooden mortar and pestle are principally made by wood workers, *gundo* is made by women from a variety of tall grass (*metil/mexii*) by skilled women.



Map 10.5. Oromo households in the study areas, Gomma.

The Oromo in Gomma use the Oromo term, *bunä* (*buna*), and the Arabic designation, *qahwa* to refer to the beverage prepared from coffee beans. The frequent use of *qahwa* is principally attributed to the fact that the people in the study area are predominantly Muslim. Consequently, they concurrently use the term

jäbäna-buna (*jabanaa-bunaa*) *and jäbäna-qahwa* (*jabanaa-qahwa*) referring to coffee pots. The coffee pot rests on a ring stand known as *battu- jäbäna* (*baattuu-jabanaa*) or *tesumä- jäbäna* (*teesuma-jabanaa*) made by women from such materials as wattle and daub painted with animal dung, bark of a tree or leaves of *ensät*/banana tree. The coffee pot is stuffed with a portion of corncob or a piece of carved wood, generally known as *qedo- jäbäna* (*qeedoo-jabanaa*) or *qädadi- jäbäna* (*qadaadii-jabanaa*).

Figure 10.34. From left to right: Coffee roasting griddle (*ele-biʗu*), a metal plate (*ele-sibila*) and a bentwood to roast coffee (*akoftu-buna*/*akoftuu-bunaa*), and a pestle (*bokku-buna*) and a mortar (*moyye-buna*).

Figure 10.35. Coffee pot (left) and a ring-shaped stand (right).

Unlike the Kafecho and the Majangir, the Oromo predominantly rely on Chinese coffee cups (*sinni)*. It is also common to see the use of *qulu*, coffee cups made of calabash brought by Muslim pilgrims,[142] who

[142] Visiting shrines of religious leaders, dead or alive, is a global phenomenon although it is now seen as sacrilegious by Islamic *Wahabbi* reformists (see Ishihara 1996; 2009). Such visits to mausoleums and shrines of saints among the Oromo are considered as a transformation of their traditional custom of pilgrimage to *Abba Muudaa* for an anointment ceremony under the *Gada* system (Asmerom 1973). Note should be made here that *Abba Muudaa,* commonly known as the *Qaalluu,* was the most significant ritual figure in traditional Oromo religion and the center of a pilgrimage (Mohammed 2005).

have been to the shrine of Sheikh Nur Hussein[143] at Anajina[144] in eastern Oromiya, or buy them from merchants who have traveled there- where its use is common.

Figure 10.36. Coffee-serving tray (*gäbäte shinni/gabatee-shinii*).

Figure 10.37. *Qulu*, coffee cup made of calabash.

[143]Sheikh Nur Hussein (Sheekena-Hussen) was a 13th century *walï* (i.e. saint) (Asmerom 1973). It is supposed by Ishihara (2009) that the Awalini -the hereditary clan of the king of Gomma is one of the descendants of the sheikh. Evidently, some of the households in Coce locality of Gomma are inhabited by members of this clan.

[144] Anajina-the site of the shrine of Sheik Nur Hussen, and Ya'a- are the two major pilgrimage centers of the Muslim Oromos in Jimma visited during Muslim holidays. While Anajina is situated on the eastern periphery of eastern Oromiya, Ya'a is located on the western border of Oromoland surrounded by Nilo-Saharan peoples (Fadhasi, Mao and Bertha) near the border with the Sudan (see Ishihara 2009).

Since coffee preparation among the Jimma Oromo is accompanied by prayers, incense burner (*girgirta/girgirtaa*) made by potters is an essential material that accompanies a coffee ceremony. Ethnographic data, therefore, indicates the presence of wooden, metallic objects and earthenware used in the preparation and consumption of coffee. The use of industrial products at both levels is nominal.

Figure 10.38. Incense burner (*girgirta*).

3.2. The Processing and Consumption of Coffee

Traditionally, the Oromo, like other coffee producing communities in Ethiopia and particularly the Kafecho and the Majangir, process dry coffee beans for household needs. *Qäšäru* (*qasharuu*) is the term used to refer to the overall process of separating the bean from the hull. For this, wooden materials, known as mortar (*moyye*) and pestle (*bokku*), are used to pound and separate the hull from the beans. Having removed dirt from the cherries by handpicking, women often do the task of pounding in pairs, each with pestle pounding in speedy relay. Then, the hulls are separated from the beans using a grass made traditional tray (*gundo*) by winnowing (*maɨesu/ maaxeesu*). Finally, the clean coffee is separated from the dirt by handpicking on the *gundo*. While the clean beans are stored for future consumption or used for instant preparation of the beverage, the hulls are left at the spot where sorting takes place or thrown in a homegardens under coffee trees or vegetables.

As in most parts of Ethiopia, coffee in Jimma is a brewed beverage prepared from roasted beans. The actual preparation of the decoction begins with washing the beans repeatedly three to four times on a small sized roasting tin plate (*ele-sibila*) on which the beans are roasted using the roasting wood, *akoftu-buna*. In

some Oromo households, coffee is also roasted on a small-sized griddle (*ele-bicu)* made for roasting coffee. As in Kafa, coffee roasted on this griddle has a reputation for its flavor. Roasted coffee is crushed using pestle (*bokku-buna*) and mortar (*moyye-buna)* following which coffee powder is added into boiled water in the coffee pot (*jäbäna-qawah)*. Boiling takes no longer than five to ten minutes and coffee is served to family members, neighbors and guests if there are any. The beverage is spiced with salt or sugar depending on preference and in some cases, milk is mixed with coffee to produce a delicious concoction.

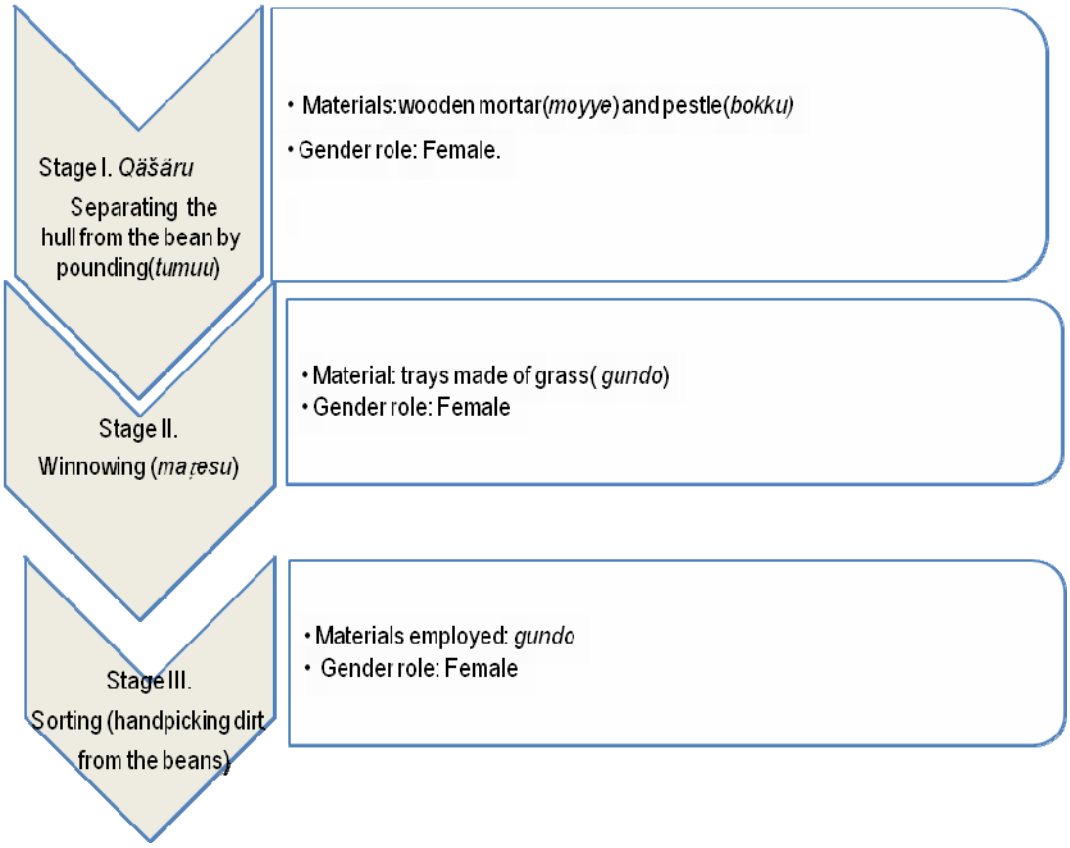


Figure 10.39. Summary of the stages in the processing of coffee, Jimma.

Oromo prayers recited habitually accompany incense burning before the beginning of the consumption of coffee. Accordingly, the two most frequented prayers during the morning and evening coffee are the following:

Kan nagaan nubulchite nagaan nuolchii!	[Dear God] give us a blessed day as you gave us a blessed night!
Kan nagaan nu olchite nagaan nubulchii!	Give us a blessed night as you gave us a blessed night!

These prayers also remind us of the Oromo conscience of beginning and ending a day with morning and evening prayers recited by the youngsters, men and women. I have the impression that this prayer is common to the Oromo and must have its roots in the traditional Oromo belief of the supreme God-*Waaqa.*[145] Usually, before the beginning of coffee consumption, a woman preparing the drink opens the ceremony with the phrase "*bunä jäba*" (*buna jabaa*) or "*qahwa jäba*"(*qahwa jabaa*) which means, "Here is the coffee." What follows is a further blessing by the elderly amid men or women gathered to share the drink. There could be disparities in the blessings that follow depending on the context in which the community is living. Unquestionably, words of prayers vary depending on situations and realities experienced by the people. A common version of Oromo coffee prayer aimed at pleading *Rabbi*[146] [*Waaqa*] during a coffee ceremony goes as follows:-

Bunii jabaa mitti, yaa rabii sittu jabaadha!	Dear God, it is not coffee which is great, but you!
Waan jabaatee nulaafisii!	Save us from difficulties!
Biyya nagaa nugodhii!	Let peace be up on the country [land]!

The above words of supplication are recited so that the creator would ward off people from any of the challenges in life: disease, drought, damaging rains and attack by enemy/ies. Before the drinking of the first cup of coffee, known as *awälä* (*awala*), it is common to deliver the following words of pleading:-

Yaa rabbii nagaan nuolchitee, nagaan nubulchii!	Dear God give us a blessed night as you gave us a blessed day!
Yaa rabbii nagaa nugodhii!	Dear God, give us peace!
Yaa rabbii nubaraari!	Dear God, save us!
Simalee enyumtuu hinjiruu!	There is nobody else for us but you!
Nubaraari nagaa nugodhii!	Save us and give us peace!
Yaa rabbii nagaa nugodhii!	Dear God give us peace!

[145] Mohammed (2005:142) notes that "*Waaqa*" is an old Cushitic term for "God."

[146] The usage of the term *rabbi* among Muslim Oromo population as an equivalent of the supreme God (*Waaqa)* has its roots in the *Quranic* term *rabb* which with a possessive suffix stands for "one of the usual names of God"(for details on the meaning of the term *rabb* in pre-Islamic Arabia and in the Quran, refer Houtsma 1987:1088).

Like several other communities in Ethiopia, the Oromo of Jimma consume coffee (*qahwa*) in three rounds: *awälä* (*awala*), *bäräka* (*barakaa*) and *aräja* (*arajaa*). A person can have a second cup of coffee from the first round (*awälä*). *Lämeso* (*lameesoo*) is the local term for doubling coffee from the *awälä*. Like many parts of Ethiopia, coffee is served with coffee snacks (*qursi-buna*/*qursii-bunaa)* chiefly roasted or boiled cereal, or bread accompanying the first round coffee (*awälä*). Members of a family and neighbors share coffee prepared at a household. In most cases, coffee is spiced with salt or sugar or without these flavoring items. In some instances, it is served with milk or butter during special occasions that I will elaborate under the topic dealing with the socio-cultural values of the beverage. The following graph presents summary of sequential activities in the preparation of coffee among the Jimma Oromo. These stages are very much similar with that of Kafa despite the differences in the name of materials used in the process.

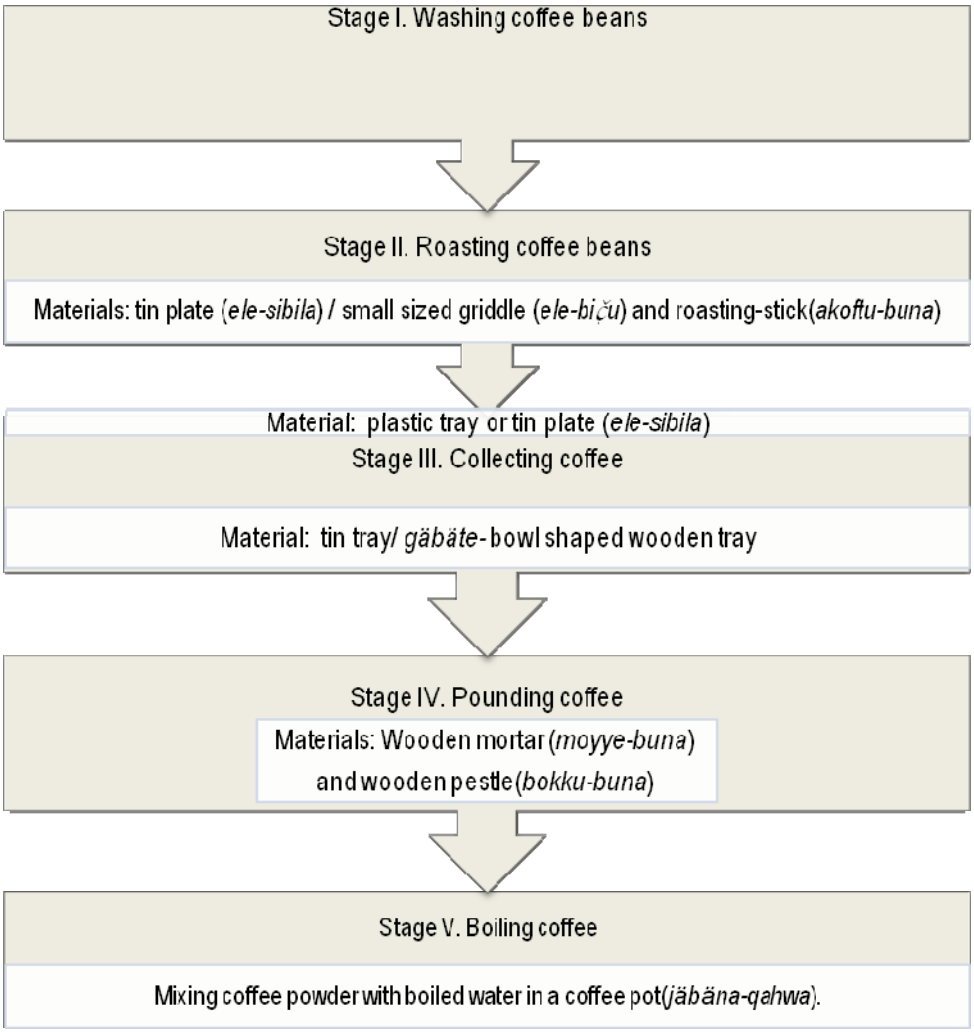


Figure 10.40. Summary of the stages in the preparation of coffee, Jimma.

Bunä-Qäla

Taking a glance at the way the Oromo consume coffee, the cultural boundaries extant among the three ethnic groups under investigation becomes obvious. The Oromo, not only consume the decoction prepared from coffee beans, but also chew roasted coffee cherries mixed with butter on special occasions. This tradition of eating coffee among the people is traceable to the remote unchronicled past (see Weinberg and Bealer 2002; Winid 1969). As it seems, people used to gather ripe cherries from wild coffee trees, ground them with stone mortars and mixed them with animal fats making small balls used as rations during warfare. Thus, they devised a more compressed solution rich in caffeine, sugar, fat and protein to fight hunger and exhaustion (Weinberg and Bealer 2002:4).

The Oromo have continued to prepare and consume coffee for dietetic value though not on regular basis - a memento of the ancient tradition of eating coffee. This is deeply associated with two distinct ways of preparing and consuming coffee, *qori* (*qorii*) and *bunä-qäla*[147]. While *qori*- toasted coffee berries and barley mixed with purified and spiced butter- constitutes one of the traditional foods, the *bunä-qäla* is a crucial component of the coffee consumption habits of the people and is intertwined with sexual metaphors and diverse rituals.

The *bunä-qäla* is an appellation derivative of two Oromo terminologies: *bunä* (coffee) and *qälä* (slaughtered). Accordingly, the verb "*qälu*" (*qaluu*) denotes "killing by cutting the throat." Hence it has literary the meaning of "slaughtered coffee". In the context of *bunä-qäla*, coffee denotes flesh and blood. Since the preparation of *bunä-qäla* is performed by a married woman rather than a man or a girl. In the whole process of *bunä-qäla*, the notion of slaughtering points to a killing during which blood is shed; in this context, it stands for the woman's blood during the process of deflowering a virgin (Bartels 1983:287). Following that, I would say that the symbolism relating the *bunä-qäla* ritual is analogous to a figure of speech in a metaphor. This has also to do with the fact that the shape of coffee beans is similar to the female genital organ. In the words of Baxter (1990:239-240), "coffee beans, like cowries…stand for women; in heightened speech they are both used as metonyms for women"- a description that supports the allegorical relation between coffee beans and woman (see Bartels 1983; Baxter 1990; Fatuma 2009).

[147] Considered as a typical revered Oromo ceremony, the practice of *bunä-qäla* was also known among the Konso, Burgi (Azais and Chambard 1931 cited in Pankhurst 1997:525).

Among the Jimma Oromo of the study area, *bunä-qäla* is prepared by piercing the tip of the pulp covering dry unprocessed coffee cherries. Then, the beans are washed and roasted either on a metal plate (*ele-sibila*) or a cooking pan made of clay- *ʈuwe* (*xuwee*). Salt and black seed (*Nigella sativa*[148]), locally called *abäsudä-gurachä* (*abasuda-guraacha*), are added on roasted cherries as vital ingredients after which pure butter is added. Finally, the cherries are mixed with butter by smearing. The results of some research among the Maccа Oromo (for example, Bartels 1983; Bula 2011) indicate that butter symbolizes a cow and hence female fertility. Once the butter melts in the roasted coffee, the *bunä-qäla* is served in a bowl shaped clay plate called *waciti* (*waciitii*). People consume *bunä-qäla* using spoon (*fälanä/falaana*) which is placed in the *waciti* carrying the *bunä-qäla*. Two of the elements of the sexual metaphor in the context of *bunä-qäla* have to do with the above preparation method. The first is the piercing of the cherry like coffee-fruits, which reminds us of the deflowering of the hymen in the vagina. The second is the way the butter enters the pulp up on the roasting process as the semen does in the vagina- an explanation that casts doubts on Dahl's (1990b:133) view that butter, in the female sphere among the Oromo, can be used to symbolize vaginal fluids. However, it accords with Bartels (1983:287) postulation that spicing coffee with butter results in "a new and even more eloquent and effective symbol of sexual intercourse." Accordingly, butter serves as a means by which the pierced coffee fruits swell up [after the entrance of the butter], a process that reminds us of pregnancy (Dahl 1990b:133). This further supports the above hypothesis of the unconscious sexual representation of semen by the medium of butter in the *bunä-qäla* ritual. The butter is also interpreted by Sperber (1974:40) metaphorically to represent semen among the culturally not distant Dorze in southern Ethiopia. The bursting and opening of the seeds in the process of roasting is interpreted by Bartels (1983:287) as symbolizing childbirth hoped because of sexual intercourse. The *bunä qäla* ritual does not only symbolize human fertility but also of cattle and sheep as well as the bursting open of seeds in the earth (*ibid.*).

Other sexual metaphors among the Oromo could be found in some aspects of furnace, pots and iron implements. Concomitant to this, Temesgen (2008:4-7) notes that the furnace is shaped representing a pregnant woman while the *madabii-* clay tuyers employed in iron smelting, hypocoristically known as *qunʈuro* (*qunxurro*), symbolize the penis. Likewise, the *faliqa* (*faaliqaa*), a small hole created after plastering the bottom aperture, symbolizes *koshe* (*koshee*) - a woman's sexual organ-the vagina. Studies in the early

[148] This spicy plant (see Fichtl and Admasu 1994:182) is also used to flavor some kind of bread and is an important ingredient in the preparation of pepper (*bärbäre*).

and late 20th century among the Borana Oromo indicate, that milk pots metaphorically represent femininity (see Dahl 1990b:129-132; Werner 1914b:282) and the association of milk with semen is pronounced by a sexual representation of the milk-pot as a womb (Dahl 1990 b: 132). Analogous with the milk-pot, the grass plate known as *gundo* metaphorically represent a girl's womb among the Oromo of Wälläga Bartels (1983). While plaiting *gundo* with an awl, girls leave a little hole in the center for fear that their womb will close to child bearing. Hence, the hole is filled by the mother of a girl. During wedding ritual, Bartels (1983:261) documented that the bride hands her *gundo* to her mother-in law- who puts some sprouting barley-grains in it as a symbol of children *Waaqa* will give her if he wills. Some coffee beans are added on the *gundo* to symbolize the female genital-the vagina- as a representation of motherhood hoped for the girl. Similar analogies can be found in the names of parts of pots representing human anatomy. In this context, however, two symbolic aspects of water-jars (*okkote*/*okkotee*) and coffee pots need to be mentioned. Water jars allegorically represent woman and to reflect that potters often decorate the neck with representation of a necklace that symbolizes women's traditional necklace made of beads. According to Bula (2010: 85), the symbolism of the water-jar gets a further impetus during male circumcision when the foreskin is placed under the jar holding water. The water in the jar is viewed as a symbol of fecundity that would ensure continuity of family. In relation to sexual metaphors that relate women and coffee, Oromized Yäma potters in Jimma decorate coffee pots with representation of tits (*muchä/mucha*) of a cow, thus symbolizing fertility.

Figure 10.41. *Bunä-qäla* ready for consumption.

The fact that the *waciti* is shaped from several lumps of clay has been interpreted (see Bartels 1983; Bula 2011) as symbolizing lineage cohesion, and thus the consumption of *bunä-qäla* from the same *waciiti*

implies solidarity. The sharing of *bunä-qäla* with neighbors during the two rituals elucidated above is a custom and emphasizes peaceful relations between families and thus, a necessary condition in creating a social setting to receive the blessings of the *bunä-qäla*. This agrees with the proposition of Bartels (1983) that the ritual denotes affable feelings between neighbors.

The Jimma Oromo in Gomma prepare *bunä-qäla* on two important occasions: upon the birth of a calf and during the arrangement of marriage. During the ritual of thanksgiving after the birth of a calf, *bunä-qäla* is prepared and the mother cow is anointed with milk and *bunä-qäla*, which is first spread over the cow's back and then smeared on its head using a perennial grass called *ɔoqorsä* (*coqoorsa*)*, Eleusine floccifolia.*[149] The cow is also given part of the *bunä-qäla* to eat. The purpose of the *bunä-qäla* ritual in that is the cow may calf again. Like the beverage, the *bunä-qäla* prepared during this ritual is shared with neighbors while it is hot and is received from the woman preparing the *bunä-qäla* with both hands. They say to the people of the house ''*kuma hora* (*kuma horaa*)'' - produce thousands of cattle; "*kuma bobasa* (*kuma bobaasaa*)''- lead out thousand heads of cattle to graze-blessings common among the Macca Oromo of western Ethiopia (see also Bartels 1983). The Oromo of Jimma share *bunä qäla* with neighbors and other people who come to the house. It is often served with yoghurt (*ititu/itituu*) prepared from the milk of the cow that has given birth to a new calf or porridge often eaten before or after the consumption of *bunä-qäla*. After the conclusion of the *bunä-qäla* ceremony, people sharing the *bunä-qäla* hold green grass and praise the family hosting the ceremony as follows:

Qeeyen kesan hajidhuu	Let your village be green
Jidhaan kesan abekamuu	Let the good be known
Horiin wal yaahoruu	Let the cattle breed
Moraa kana hagutuu	And fill this compound
Xinaan hagudatuu	Let the little ones grow
Bekaan hira aturuu	Let the wise live longer

Bunä-qäla is also prepared when the family of a bridegroom sends elderly men to the family of a bride in order to request for the conclusion of a marriage. Accordingly, the mother of the bridegroom prepares *bunä-qäla*, which along with *khat* (*Catha-edulis*) is sent to the bride's family through the elderly. *Bunä-qäla*

[149]Also known as *akerma*, it grows extensively in meadows and fallow ground at altitudes between 1700 and 3200m (Fichtl and Admasu 1994:173).

and *khat* are chewed while discussing about the matrimony. It is, however, customary to return a portion of the *bunä-qäla* to the family of the boy.

The *bunä-qäla* ritual is also practiced during *atete* (*ateetee*), a female ritual invoked for the health and fertility of women and childbirth (Bartels 1983; Bula 2011). Bula's work among the Oromo of Wälläga adds to the repertoire of our knowledge on the use of the *bunä-qäla* ritual up on the naming of a newly born-baby (*mogasa*/*mogaassa*), and sacrifice for the spirit of a deceased person. During the *bunä-qäla* rituals relating these occasions, the coffee beans are eaten in the context of a prayer and in memory of the tears of *Waaqa* from which the coffee plant is believed to have sprouted. This line of argument accords with Bartels presentation of the Mäccа Oromo myth on the origin of coffee, which describes the place that the *bunä-qäla* ritual occupies among the Oromo living in southwestern parts of Ethiopia. Accordingly, he retells the story about death of the first man and the coffee plant sprouted from his graves from the tears of *Waaqa* (Bartels 1983:304-307). The preparation and consumption of *bunä-qäla*, albeit a very old tradition, is still practiced among the predominantly Muslim population of Gomma. The rituals involving the *bunä-qäla* ceremony are closely tied with fertility (both of human and of cattle) and creating bond through marriage. I would also say that the preparation and consumption of *bunä-qäla* preserved to date is a memento of a pastoral and an egalitarian ethos that the roots of the tradition could conceivably be traceable to the unchronicled past. Evidently, Mohamed (1990:16) tells us that the Oromo in Gibe states, particularly of Gomma were using coffee as a substitute for blood in feasts and ceremonies. Thus, the plant is still perceived as an animal that is ritually sacrificed. From this point of view, coffee could be placed somewhere in between the animal and vegetable realms for the Oromo. The above postulation receives a strong support from ethnographic account of the "*bun-qälle*" ceremony among the Gärri[150] in southern Ethiopia (see Getachew 1990:13-28). They "slaughter" coffee for rituals and celebrations in a way very much similar with the Oromo in western Ethiopia. Both the Gäri and the Oromo are keen at slaughtering coffee than their animals if it is for rituals.

[150] Belonging to the eastern lowland Cushitic, the Gäri speak two Rahanwiin Somali-related dialects (i.e. Afan-Darawa and Afan Kofar) and the Borana Oromo parlance (Getachew1990).

10.4. The Values of Coffee

As we have seen, coffee consumption among the people of Ethiopia is interwoven with traditions. The consumption of the drink itself creates an important social gathering -a ritual that helps household members to socialize themselves at family level and with members of immediate neighbors at large. It is also an important drink used in welcoming guests (see also Brinkerhoff 2011; Getachew 1990; Pankhurst 1997; Roggof 1995). Remarkably, coffee is one of the plants deeply related to various forms of rituals. In light of the objectives of the dissertation, therefore, a great deal of attention is given to four principal uses of the plant: economic, socio-cultural, medicinal and nutritional values. Since there are analogous features in the economic, medicinal and nutritional values of the plant among coffee growing farmers in this part of the country, the discussion on these themes are generic where as the socio-cultural aspects of the consumption of the beverage is presented independently for each ethnic groups although drawing parallels on comparable features is inexorably indispensable. From the very outset, note should be made that the presentation of data on the nutritional value of the consumption of the decoction prepared from coffee beans, albeit petite in its nature, is basically based on secondary sources. On the other end of the spectrum, the results of laboratory analysis on the food contents of *kari* has furnished new evidence on the principal differences with the beverage prepared from the beans.

10.4.1. Economic Significance

Coffee is not only at the heart of Ethiopian hospitality, but also accounts for 10% of the country's Gross Domestic Product (GDP) and central to the livelihood of around 25% of the population. The majority of coffee cultivated in the coffee growing regions of the country including the study areas in Oromiya and Southern Nations, Nationalities and People's Region (SNNPR) is prepared using a dry processing system. Sun drying coffee cherries is a method predominantly practiced by farmers, but the quality of cherries can be affected, as a slow or poor drying process could result in fermentation spoiling the natural aroma and flavor of the beans. Consequently, local collectors, traders and cooperatives buy sun-dried coffee beans from farmers at a rather lower price (Tadesse and Feyera 2008). In view of that, coffee's economic significance in the study areas cannot be underrated although income generated from the sell of coffee is not as high as one might expect. Evidently, many of the farmers I interviewed bemoan the cheap prices given to coffee during harvesting and after. Even then, farmers relay on the income from the sell of coffee beans to meet their financial requirements for a variety of purposes, but mainly to complement household

needs. The amount of yield in an agricultural year and the size of land cultivated by coffee are two of the major factors that decisively impinge on income from coffee though price cut set by individual merchants to buy wet unprocessed cherries during harvesting and the price of coffee in the market are other relevant determinants.

While coffee growers sell a large part of cultivated coffee in markets without further processing, part of the yield is reserved for household consumption. The price of unprocessed dry coffee beans vary in different parts of the year at the local markets in the study areas though the general trend shows that prices are lower in the immediate months after harvesting whereas there is an obvious rise in the months between April and the next harvesting season. A coffee growing family also gets a good amount of income from the selling of wet cherries to coffee processing plants and dry-unprocessed beans to individual consumers within the locality of its production and in other parts of the surroundings. To get better prices, farmers tend to store part of the dry unprocessed coffee beans for sale in the latter months when coffee prices are relatively higher and hence do not sell all marketable coffee after production. Coffee disease and poor management practices negatively affect production and subsequently poor economic outcome in such agricultural year when either or both occur simultaneously. Most often, farmers with large and well-managed coffee farms get high yield and are economically better off despite fluctuating coffee prices in the market. The Majangir, unlike the Kafecho and the Oromo of Jimma, principally rely on the consumption of *kari* because of which only a small portion of coffee beans cultivated by farmers is set aside for household use. Coffee beans, both wet cherries and dry beans are sold during and after harvesting. In all the three study areas, unprocessed wet cherries are sold at fairly lower prices to coffee processing plants than dry unprocessed coffee beans sold in the months that follow harvesting to merchants of the town. Traders fix prices up on buying dry unprocessed coffee from farmers and deliver to dry coffee processing plants. Women sell coffee beans in the weekly markets at retail prices.

Figure 10.42. A woman selling coffee in Mankira locality, Kafa.

The economic significance of *kari* can be explained from two different perspectives. First, there is an economic opportunity created by the consumption of the drink itself. The fact that the Majangir rely on the consumption of the drink prepared from coffee leaves indicates the chance created to commercialize coffee beans cultivated by farmers. Evidently, compared to Kafecho and Oromo farmers, the Majangir reserve a negligible amount of coffee for household consumption. The other dimension of the economic value of the plant is the income generated through the sell of the infusion prepared from coffee leaves. Accordingly, the drink is sold in the capitals of three zones of SNNPR: Aman (Shäka), Mizan (Bench-Maji) and Bonga (Kafa) -where the sell of the same type of beverage (*cemo*) has become a profitable business (see Yitayal and Achame 2014). It is also sold in the vicinity of Teppi, where it is consumed by people in the town particularly for its alleged medicinal value in fighting flue.

10.4.2. Socio-Cultural Aspects of the Consumption of Coffee

Currently, the coffee ceremony is amongst the traditional rites that comprise the cultural practices of Ethiopia in general and the southwestern part of the country in particular. It is indisputably a significant setting for female identity and socialization between individuals living in the same neighborhood. Traditionally, an Ethiopian woman hosting guests with coffee is seen as good in her cultural community (see also Brinkerhoff 2011; Rogoff 1995). From ethnographic and cultural perspectives, this helps the examination of different cultures in their own context and in relation to others through shared practices pertaining to the consumption and use of coffee.

10.4.2.1. The Kafecho

A number of anthropological and sociological literature on food consumption (for example, Appadurai 1981; 1986; Douglas and Isherwood 2001; Goody 1982; Mennell *et al.* 1992; Messer 1984) emphasize the role of food as a medium of communication. These sources also point to the role of food in constructing and buttressing social relations, and in creating boundaries between individuals that belong to, or excluded from a group. Dietler and Hayden (2001) also explain the role of food consumption in defining social relations between the host and the guest. In this context, the coffee consumption has to do with the relations established between neighbors sharing coffee each with a periodic turn to host the coffee ceremony and communal participation in the everyday commensality ritual in coffee. The socio-cultural values of coffee are reflected in different aspects of Kafecho life. The consumption of the beverage can be seen as a forum for social gathering. The drink is used to bolster relations between neighbors who not only communally share the drink, but also discuss problems, social, economic issues and the ways to assist each other. During such holidays as Christmas and Easter, butter or milk is infused in coffee and shared with neighbors. Of the several issues discussed during coffee ceremonies are schooling of children, social problems and marriage.

The preparation and consumption of coffee between neighbors is cyclic in nature as the beverage is prepared among neighboring households two to three times a day and neighbors share coffee in each of the houses where coffee is served. This might not be the case with the potters belonging to the subaltern classes (Mänjo, Manno and Mäniyo) in which case the consumption of coffee is restricted to a family level. This is chiefly because the non-craft Kafecho are deterred from mixing with these groups socially. In the context of coffee consumption, it is habitual for the subaltern clan to prepare and share coffee within a

family. In fact, individuals belonging to the subaltern clans are not only alienated from attending coffee ceremony in the house of other Kafecho clans, but are not permitted to enter the house of other clans. This is rather more pronounced in the Gimbo area, where one could come across a Mänjo family living in a compound of another Kafecho clan for the labor provided for the owner of the land. The exclusion of the subaltern class in the coffee consumption among other clans is part of the social distancing attributed to cultural reasons explained in chapter six of the dissertation.

Figure 10.43. Women serving coffee during a communal work (*dado*) in an agricultural field, Mankira.

Coffee is also consumed during communal works (*dado*) organized during agricultural practices relating the preparation of the land. During this ethnoarchaeological research in Kafa, the researcher witnessed the consumption of the beverage in a *dado* organized at Mankira where women were serving farmers partaking in the communal work. The beverage consumed during such events are prepared by women from the house hosting the communal work and neighbors who would fetch boiled coffee in *bune-qondo,* bread, boiled or roasted grains to the farmland. Coffee consumption is part of the feast offered to participants of the communal work and continues till the end of the work which would take few days although that varies depending on the size of land under cultivation. The same is true of the harvesting of coffee when five to six people join a family to assist the harvesting process. During these occasions, women take the responsibility to prepare and serve coffee to men partaking in the communal work (*dado*).

Another interesting aspect in the consumption of coffee in Kafa is the way it is used in a ritual known as *ɔoro* -pouring coffee on the ground. Women pour a cup of coffee in front of the place where coffee is served, but chiefly at the entrance of a house. *Coro* from a *tinjano* or a *bune-sinno* is interpreted by some as thanking the land that yields coffee. The reason behind the practice is vividly explained in the word of one of my informants: "we produce coffee on the land, so we pour the beverage on the ground." During the *ɔoro,* part of the meal to be served with coffee is placed on the ground. The context in which this is practiced varies although my presentation here will focus on the *ɔoro* during coffee consumption and offering coffee as part of the *dejo* -offerings given to the earth before harvesting. It is customary to give offerings before collecting the yield. In both cases, however, the ritual is related to paying respect for the god of harvest, *qollo*. Farmers give offerings to the land as an expression of thanking it for the good harvest and hoping a better yield for the next harvest season. The *qollo-dejo* ritual is practiced for such crops as corn in June and July, *ʈef (gäsho)* in December, and coffee (*buno*) in October and November. There are, however individuals who do not practice *qollo-dejo* for coffee. Offerings during the *qollo-dejo* ritual comprised of food and beverages. All food for sacrificial purposes except those from meat and fresh crops of the harvest is cooked at home. None of the food prepared at home is tasted before offering to the god of harvest. The major food items offered during the *qollo-dejo* ritual in Mankira vicinity entail milk, a type of beer called *borde* (*bordee*),[151] *kijo* (*kiijoo*) made of crushed corn cooked in a clay pan called *dišʈo* (*dishxoo)* or *disto (distoo*),[152] blood and meat of chicken, ox and sheep but never a goat. Only a small part of these offerings is left in trees nearby harvested fields. The pouring of *borde* or *kafi-doɔo* (*kafii-docoo*), a local beer made of *ʈef* (*gäsho*) in selected areas for blessing the harvests reminds us of the way beer is used among different peoples of Ethiopia, such as the Gwama and the Mao(see González-Ruibal 2014).

Since *qollo-dejo* is an old tradition, some individuals view its disruption as perilous resulting in a nuisance to people, animals and crops and children. Sacrifice in blood of animals has been a common element of the *qollo-dejo* ritual though it has significantly dwindled in Mankira area. Nonetheless, the practice has continued in the district of Gimbo particularly in the Ebrägoda area, where farmers also offer part of their harvest particularly grains and chickens to the *qollo*. A point that sparks a further interest in the *qollo-dejo* ritual, explained above, is the exclusion of women and children from directly participating in the ceremony.

[151] *Borde* is a local drink made from a mixture of sorghum, malt and *ʈef* (*gäsho).*

[152] This appellation for clay made cooking pan is derived from the Amharic term for the same pan, *dist.*

All male partaking in the ritual would eat food, drink the beverages after offering to the god of harvest, and finally sing and dance. After the conclusion of this ritual, women and children would eat the remaining food at home. The *qollo-dejo* ritual reflects the so called "ritual contexts" explained by Palmer and Van-Derveen (2002:196), where the social role of food looks less obvious .It also represents how food, apart from quotidian commensality, is used in offerings to deities. The fact that only men are involved in the *qollo-dejo* ritual reminds us of the differences in the types of persons partaking in ritual and daily commensalities like the consumption of coffee. Depending on the type of commensality, there is also a noticeable variation in the nature of relations constructed. Concomitant to this view, Bray (2003:9) notes that ritual commensality reinforces "social relations with external others", where as daily rituals build social relations in the domestic context. It follows that the *dejo-qollo* ritual represents a ritual commensality that periodically creates social relations with the supernatural, the god of harvest.

Another important occasion during which one can witness the role of coffee in rituals is the celebration of the *Ginbot-lidäta* –the first day of the month of *Ginbot* in Ethiopia (May 8) when Christians celebrate the *lidäta mariyam*[153] (the birth of Saint Marry). The Kafecho in the study areas prepare a reasonable feast at home, under a tree, within a compound or in special huts only used for the *Ginbot-lidäta* ceremony. During this feast, coffee, boiled or roasted cereals and bread are instantly prepared at the spot where the ceremony is organized[154]. Coffee is poured on the ground, under a tree or the central pillar (*gimbo*) of a house depending on the place where the ceremony takes place. People attending the feast eat and drink at the site following which blessing (*diro/diiroo*) was bequeathed by the elderly to conclude the ceremony. Part of the themes of the *diro* centers on peace and prosperity of the people as reflected in the following prayer:

Yarii-imbee!	Let God provide you!
Hin adbaare imboyee!	Let this spirit [god] provide!
Nashii yatoom quyee boyee!	Let the spirit [god] guard your children!
Nahaa jitonee quyee boyee!	Let the god safeguard your cattle and wealth!

Coffee's cultural significance in Kafa is also closely linked to its use by ritual experts (*alamo*), who make use of the beans to tell fortunes. According to informants, an *alamo* uses the residue left after drinking the first cup of coffee. They do this by pouring coffee from the cup

[153] Pervasively practiced by Christians in many parts of Ethiopia, the *Ginbot-lidäta* involves the preparation and the consumption of coffee, boiled cereals (*nifro*) and bread up on the ceremony in supplication of Marry.

[154] Pouring a small part a drink or tossing part of the food prepared for *qollo-dejo* and *Ginbot- lidäta* is common in Kafa.

on the ground and tell such fortunes as to where a house should be constructed, about the woman to be married and how to make wealth. People offer incense and cash after the hearing prophesies told by an *alamo.* The study of the ritual use of coffee in the study areas was indeed a difficult undertaking partly because individuals are less willing to reveal information on their personal beliefs and above all owing to the vanishing nature of the practice. Nevertheless, I was able to acquire first hand information from two *alamo*s from Decha and Adiyo and ancillary ideas from other informants.[155] In view of that, the *Alamo* at Yänga locality of the district of Decha avers that coffee is used in rituals, especially in telling fortunes in three different ways. These are: (a) by placing roasted coffee in the hand of the *alamo* who tells fortunes by counting the beans (*hädona/haadonaa*) or by watching the roasted beans at hand (*cinona/cinoonaa*), (b) telling fortunes using *coro,* coffee poured from the first, the second or the last round, and (c) by looking into the *däräso* -a small amount of coffee left in the *tinjano* after drinking coffee or from a cup full of coffee called *cäno*(*canoo*).

Figure 10.44. An *alamo* from Yänga, Decha-Kafa.

[155]The idea of telling fortunes using *coro*, boiled coffee poured on the ground, is also supported by an elder son of a Manjo *alamo* who died in 2006. The informant remembers that his father used to pour coffee from *tinjano* and tell about the future (i.e. about disease, danger and the good things that could happen). People from different clans of the Kafecho used to appear in his home and get the predications turn by turn. He remembers that his father used to be visited by many people who brought money and coffee as a gift in return for the service provided by the *alamo*.

10.4.2.2. The Majangir

The Majangir, as in 1960s and early 1970s (see Stauder 1971), still place a high degree of value on the concept of neighborhood and for this purpose, consuming *kari* remains essential. Quite correctly, Stauder (1971:109) pointed out that coffee shared in the morning implies proximity between adjacent homesteads, and its role in buttressing relations and creating social cohesion has continued up until the present. Common coffee explained by Stauder is still the custom and implies neighborhood. The regular consumption of *kari* indicates that the presence of strong neighborhood relations among the Majangir is to a substantial degree centered on sharing the drink. Not only neighbors, but also guests can attend common *kari*. Sharing common *kari* is a forum where different matters are raised and discussed. Commonly, neighbors discuss about social, economic and family matters. Since the drink is prepared on regular and cyclic basis between closest homesteads, *kari* is repeatedly shared between neighbors who socialize themselves on a regular basis. Sometimes, the drink prepared in two neighboring homesteads is shared in either of the houses.

Kari is also an important drink in agricultural activities of the Majangir. Particularly in communal works (*dado*) where participants partaking in such agricultural activities as harvesting corn and sorghum or during hut construction are served with the drink along with other edible items, chiefly boiled or roasted cereals. The drink is also prepared while protecting crops from crop-destroying arboreal animals in *gode-tepo*, a thatched shelter constructed near coffee farms. The preparation and the consumption of the drink is also a common practice during holidays, birth and when elderly people meet for arbitration. The same is true after funeral ceremonies when mourners from a village and distant places present themselves in the house of the family of a deceased person where they are served with *kari* and food. The drink is, thus, not only a means of consolidating relations between neighbors, but also one of the cuisines served during wedding ceremonies.

One of the traditional beliefs pervasively known before the advent of Christianity among the Majangir was belief in supernatural spirits, *Doqtan* (a form of guardian spirit believed to be appointed by God), and the *Rähawi,* the veneration of which have now largely vanished. Present day Majangir communities living in the study area near Teppi are Protestants and hence, do not believe in traditional religious practices. Nonetheless, there are reports of the presence of the belief in these spirits by a section of the Majangir communities living in Tangua area of Bench-Maji zone, in Kumi area of Godäre district, Mängäshi, Doqe

and Kokeyi localities of Mängäshi district in Gambela Regional State. In these areas, people living in homesteads close by a person possessed by *Doqtan* grow broad leaved tall grass known as s*ärṭe*, and splash *kari* under the grass as an expression of a reverence for the spirit. Part of the reverence for the *Doqtan* spirit is a ritual that involves offering in *kari* and coffee seedlings. A woman preparing *kari* pours part of the first round distilled *kari* (*od'owan*) before the onset of consumption under a tree using *mätäge* or a piece of calabash known as *pelte.* The woman places a stone under a tree, and regularly pours at the same spot, bows down and prey under the tree. Up on the fulfillment of their demands, men char coffee seedlings and mix them with water in a pot over which a flaring fire is added in the pot, which is placed on three wooden logs erected in the form a hearth. During this ceremony in supplication of the spirit, men lead the prayer accompanied by women wearing beads (*telefan/telefaan*) and bracelets (*lijan/liijaan*).

Another aspect of the use of coffee in rituals is associated with the *Rähawi* -a form of spirit characterized by periodic appearance of an invisible supernatural force to a village where elderly men venerating the spirit char an untouched coffee seedling from the surrounding and place it under a tree as an offering to the spirit. One area of difference between individuals possessed by *Doqtan* and those venerating the *Rähawi* is that the former can tell fortunes after receiving such gifts as grain beer (*tajan*), honey-wine (*ogol*), chicken, sheep or money. Notwithstanding the vanishing role of coffee in traditional beliefs among the Majangir, past and surviving practices are redolent of the ritual significance of coffee as a plant and *kari*. Therefore, it can be said that both the plant and the drink are still used as offerings to thank or appease the supernatural in living traditional beliefs of the Majangir, one of the lately Christianized populations in Ethiopia.

10.4.2.3. The Jimma Oromo

Coffee is an essential cultural and spiritual element in the lives of the Oromo (Bartels 1983; Baxter 1990; Bula 2011; Fatuma 2009; Yades *et al.* 2004). Like the Kafecho and the Majangir, coffee is a principal drink that bolsters relations between neighbors. In particular, sharing coffee helps the consolidation of friendship among women living in the same vicinity. Since women prepare coffee at home and the preparation and the consumption of the drink is cyclical between neighbors, women and men sharing the same coffee in a neighborhood get the opportunity to discuss various issues. Coffee consumption also accompanies such social practices as post-funeral attendance in the house of a deceased individual and communal agricultural activities (*dado*) and during such special occasions as conflict resolution, communal prayers

under shade of a tree and the chewing of *khat* (*Catha edulis*), the consumption of which is common in households and mourning places.

Figure 10.45. A coffee ceremony in a compound of an Oromo family, Dalächo.

From a cultural perspective, coffee is prepared during three most important occasions: during holidays, harvesting season and trying times. In broader perspective, the value of coffee is relatable to its significance in pleading and thanking the creator, *Waaqa.* For instance, the beverage is prepared during the Christian *Ginbot-lidäta*, under a shade of a tree, within a village or within a compound of an individual, and shared by neighbors. The roots of this practice among the Muslim Oromos in Gomma cannot be ascertained. Since it has no religious implications, it is merely a tradition absorbed into the cultural practices of the people. An alternate explanation of the practice is the possibility that communal prayers invoked during this occasion are aimed at appeasing God (*Waaqa*) for a good rainy season and subsequently good harvest few weeks before the onset of heavy rains in the region.

As in other coffee ceremonies, pouring a small part of boiled coffee on the ground[156] before drinking the first round coffee (*awälä*) is a common practice since the hazy past although the meaning of it cannot be told with certainty. Part of the connotations attached to pouring coffee by the Jimma Oromo resemble the living observance in Kafa where pouring coffee (*coro*) on the ground is interpreted as thanking the land that grows the plant and hence, the land savors the drink before the people start sharing the coffee. In some instances, pleading the *ayanä* (*ayyaana*)[157] (spirit) of a house is carried out in the same way.

The context in which the Oromo use the term "*ayyaanä"* varies although its application here could be correlated to its use in relation to divinity (spirit) (see Gemetchu 2005; Tamene 2000; Zitelmann 2005). Be it that it may, the centrality of coffee in blessings and prayers among the Oromo should be underscored here. In this regard, Yades and his colleagues discern two kinds of prayers featuring coffee, prayers from Quran and individual prayers (Yades *et al.* 2004). In Gomma, coffee's role can also be seen in time of such difficulties as decline in production, epidemic and shortage of rainfall or damaging rainfall. During these occasions, the beverage is prepared under a shade of a tree in a village, within a compound of an individual or within a mosque compound where people gather to attend prayer (*dua'a/duai*).[158] In Islamic Oromo tradition, the *dua'a* supplication offered at the beginning of the coffee service is an integral part of the service (see also Yades *et al.* 2004). During this occasion, *khat* is chewed alongside with coffee and a communal prayer (*duai*) is held to plead *Allah* to heal the victim/s and bring rain or stop disastrous rainfall. The burning of incense, pouring a cup of coffee and interspersing a small amount from the meal (*qursii-bunaa*) that accompanies the coffee ceremony is common before drinking the beverage from the first round (*awälä).* This is viewed as part of the offering to the land that gives coffee, and other agricultural products. During the summer of 2014, the study area experienced a very high rainfall that destroyed crops. Coffee

[156] Pouring coffee at the spot where coffee is prepared or in front of an entrance is not common to all households, and neither Christianity nor Islam supports this ritual.

[157]The term *ayyaana* is a meaning laden word. For instance, *uumaa* -everything created by God (*Waaqa*) - has a character (i.e. *ayyaana*) of its own (see Bartels 1983; Gemetchu 2005). It could also mean celebration (ceremony); divinity (spirit), angel, grace and fortune/luck (see Tamene 2000:41). This living tradition, with several meanings, is presumably linked to the Arabic Islamic equivalent-*iyān* that also has several meanings including a 'personal revelation of God' (Zitelmann 2005:83) very similar to the application of the *ayyaana* as "personalized, feared and invoked manifestation of supreme *Waaqa"* among the Oromo (*ibid*: 87).

[158] In Islam, the Arabic *sälat* refers to the five ritual prayers where as the *dua'a* stand for other forms of supplication (Yades *et al.* 2004).

was then prepared in a mosque compound and a communal prayer (*duai*) led by elderly men was conducted before sharing coffee as follows:

Yaa rabii raahmatakee nukeeni, nunmidhiin!	Dear God let your blessing be up on us, save us!
Saani kees, namnii kees goguu hindandeenyuu!	Your cattle and human cannot be starved!
Yaa rabii, kan robee numinee,	Dear God, let the rain that falls be harmless!
kan caamees numinee rahmatakee nukeeni!	Let its absence be harmless; give us your blessings!
Yaa rabii nufurii!	Dear God, give us redemption!
Yaa rabii raahimata nukeeni!	Dear God, give us blessings!
Yaa rabii nuf araramii!	Dear God be with us!
Robdee numidhiin!	Let your rain be harmless!
Caamtee numidhiin!	And, let its [the rain's] absence be harmless!
Bokaa gaarii kan qileensa hinqabnee!	Let the rain that falls be without wind!
Kan cabii hin qabnee yaa rabii nukeeni!	Let the rain that falls be without snow!
Xinaa keenyaa nugudiisi gudaa keenyamoo nubulchii!	Let our children grow and let the grown up live!
Walaala keenyamoo nubeksiisi!	Let us know our faults!
Yaa rabii nuaaraarami!	Dear God be with us!

After every pleading statement led by an elderly, people gathered to share coffee reiterate *"amen, amen."* The above prayer is a memento of the overall purpose of Oromo rituals. As Aguilar (2005:57) puts it, "Oromo rituals recreate, enact and maintain the social order with the divine one. They generally call for *waaqaa*'s intervention in the cosmos, which has created and sustains." Accordingly, prayers for rainfall, the wellbeing of the cattle and humans emphasize this celestial order as *Waaqa* - the master of every activity from the heavens.

As part of the fasting customs, Muslims do not drink coffee at the daytime during the fasting periods, *Id Alfätir Rämädan,*[159] *Aräfa* and *Aräjab.*[160] However, they consume the beverage during the evening- a

[159] *Rämädan* is the name of the ninth month of the Muhammadan calendar. Its root r-m-d represents the heat of summer. It is the month in which the *Quran* was sent down we are told in connection with the establishment of the fast of *Rämädan* (Houtsma 1987 VI: 1111).

[160] The *Aräjab* fasting period lasts for a period of a month between the last weeks of April and May. Like the *Rämädan* fasting, it

practice that often accompanies *khat* chewing. Coffee mixed with butter or milk is also consumed at the end of the fasting seasons. I have witnessed the consumption of coffee during three evening coffee ceremonies of the *Rämädan* fasting period when the following pleading words were avowed before the consumption of the first round coffee (*awälä*):

> Yaa jia'a Rämädan wagaan nugesee issa dhufuufiis fayaadhaan nuga'ii!
> Dear God, take us to the next Rämädan as you have brought us to this one!

The preparation and the consumption of coffee among the Jimma Oromo is not only related to enjoying the stimulating effects of the beverage, but also entails a deep socio-cultural meaning. Its role in strengthening social cohesion, offering guests with hospitality and gathering people for commensality rituals including pleading God (*Waaqa*) in difficult times cannot be underestimated.

10.4.3. Nutritional Significance of Coffee

In this section of the dissertation, the nutritional value of coffee is addressed concisely based on secondary sources. The consumption of the beverage is principally not for its nutritional significance, but for its effect as a stimulant. Nevertheless, it provides certain amounts of nutrients, which will be explained in the forthcoming paragraphs of this section. To different scholars (for example, Belith *et al.* 2009; Clifford 1985; Mussato *et al.* 2011; Sontang and Karl 1980), caffeine is the most important constituent in green coffee. It occurs in the pulp, within the cytoplasm and bound to cell walls. The role of this stimulating nutrient in affecting the bitterness of the beverage is very limited (Clifford 1985:310). Among other chemical compositions of coffee beans, caffeine is the only part that cannot be destroyed by extreme roasting (Mussato *et al.* 2011). Other constituents of coffee bean include cellulose, minerals, sugars and lipids and several forms of amino acids (see Belith *et al.* 2009; Grembecka *et al.* 2007; Mussato *et al.* 2011; Santos and Oliveira 2001). Besides, coffee beans also have Vitamin B complex, Niacin and Chlorogenic acid (Belith *et al.* 2009; Trugo 2003; Trugo and Macrae 1984). Of these, carbohydrates are the key components of green coffee (Clifford 1985:320). On the other hand, substances like proteins, sugars and fat may either be preserved or destroyed or even transformed into reactive products in the process of roasting (see Ginz *et al.*2000 ; Mussato *et al.* 2011; Rawel and Kulling 2007; Trugo 2003 ; Trugo and Macrae 1984). Quite correctly, roasting coffee is thus regarded as a factor that has an effect on the nutritional value of the

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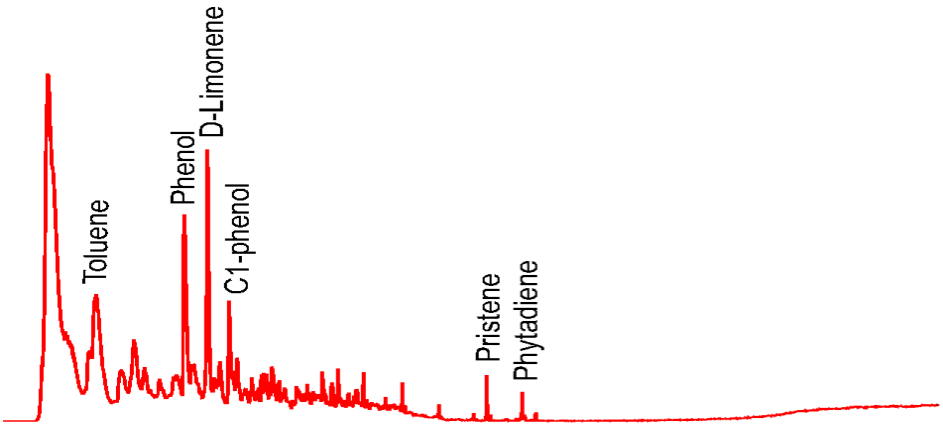
lasts from morning to evening until after sun set, around 7:00 pm.

beverage (see Clifford 1985; Hassen 1970). From the available data, one can infer that most of the chemical components with nutritional value are either lost or altered during roasting.

Since the Majangir fundamentally consume the infusion from coffee leaves (*kari*), examining the nutritional value of the drink and assessing its values is indispensible. Here, the objective is to show the major contents of the drink based on laboratory examinations on coffee leaves and the infusion itself. Although the Majangir customarily think that the drink is nutritious, understanding the contents of coffee leaves and the infusion requires scientific investigation. In the succeeding paragraphs, I present the results of the analysis on the contents of leaves of *Coffea arabica* and *kari.*

The major components of a coffee leaf from southwest Ethiopia were examined at the Biology laboratory of USC (University of Santiago de Compostela). The result of the analysis on coffee leaf pyrolysate, presented in the graph below, shows that phenolic constitution, together with a limonene resin and markers of chlorophyll (pristine and phytadiene), are the main constituents of the coffee leaf. Unlike coffee beans, the analysis shows that coffee leaves lack caffeine[161] indicating the non -stimulant nature of *kari* prepared from coffee leaves.



Graph 10.1. Contents of coffee leaf pyrolysate

Since the Majangir prepare *kari* with a substantial addition of other ingredients, mostly pepper and a variety of aromatic plants such as garlic, *jomu* or *bäsobila* (*Salvia nilotica*[162]), Herb of Grace, Rue - locally called

[161] The stimulating effect of caffeine was discovered for the first time in 1820 (Nehlig 2004:20; Schnapp 2001: 244).

[162] Refer to the scientific name in Fichtl and Admasu (1994).

cädramoy (*t'ienaadam*) and salt, understanding the values of this drink becomes very interesting due to the absence of prior scientific investigation on the subject. In view of that, 300 ml of *kari* were analyzed at the Center for Food and Nutrition Laboratory of Addis Ababa University. Analyzing *kari* for its food contents was primarily aimed at understanding the energizing effect of the drink by measuring its carbohydrate, fat and protein contents. Assessing and calculating the amount of other constituents in the decoction, mainly moisture, ash and fiber was also an important task to evaluate the energizing effect of the drink. The result of the experiment on a dry sample of the infusion is presented in table 10.1. For details on the procedures involved during laboratory analysis, see the manual annexed at the end of the dissertation.

The results of laboratory analysis on the food contents of *kari* show that the infusion is rich in terms of moisture, carbohydrate and protein correspondingly. However, the amount of fat and fiber present in the drink is still minimal. Based on this study, therefore, it is logical to deduce that *kari* is nutritious, and can serve as a source of energy and above all, has hydrating value in warm areas of southwest Ethiopia. The changes that could occur to the ingredients mixed while boiling the infusion cannot be explained here although some of the herbs used in spicing, particularly *cadramoy* (Herb of Grace, Rue) and garlic are traditionally used to treat different diseases (for example, stomach ache and flue).

Table 10.1. Results of food content of *kari*.

Sample Type	Moisture (g/100g)	Protein (g/100g) In wet basis	Fat(g/100g) In wet basis	Fiber(g/100g) In wet basis)	Carbohydrates (g/100gm) Calculated by difference
Kari	97.12±0.10	0.29±0.00	0.06±0.00	0.004±0.00	2.40
Volume(ml)	97.12± 0.10	0.29	0.06	0.004	2.40

10.4.4. Medicinal Values of Coffee

Scientific studies attributed to various scholars (for example, Maranhão *et al.* 2004; Nardini *et al.* 2004; Nehlig 2004; Smith 2004; Patarroyo 2004; Yagasaki 2004) indicate that coffee is not a harmful drink as previously thought. For a normal person, consuming between five and six cups of coffee a day has significant health benefits. Therefore, the view that coffee is a harmful drink becomes bizarre if one is to evaluate the several positive effects of the drink attested by solid scientific evidence (for instance it has anti-oxidant, anti-inflammatory properties, it offers protection against degenerative brain diseases like Alzaimer's and Parkinson's and reduces the risk of hepatic cirrhosis). Traditionally, diverse medicinal plants are used in Ethiopia to treat different diseases (see also Mirutse and Tilahun 2007; Ragunathan and Solomon 2009; Shemsu *et al.* 2010; Shigeta 2008). The range of medicinal plants serves as substitute of modern medicinal plants and thus enhances the health and security of local people (Shigeta 2008). Assessing the medicinal value of coffee, though not a principal goal of the dissertation, is part of evaluating the importance of the plant in southwest Ethiopia. Most of the data discussed here were obtained during interviews in the field, although there is discrepancy in individuals' knowledge on the use of the plant in treating disease. The therapeutic value of the plant is less accentuated among the Oromo in Coce area of the district of Gomma. Thus, the discussion on the subject is based on primary data obtained from the Kafecho and the Majangir in the study areas.

In Kafa, coffee is used in three different ways to treat a variety of diseases. Traditionally, dysentery, headache and common cold are treated by consuming a spoonful of coffee powder mixed with honey, smelling roasted coffee and drinking the beverage are considered as cure for headache. The health benefit of consuming coffee derives from the chemical constituents of the beans. Accordingly, the chemical composition of coffee studied by different scholars (for example, Kodama 2008; Mussato *et al.* 2011; Oligashi 2008) suggest the advantages that could be obtained through the consumption of coffee. Especially, the presence of polyphenols (mainly caffeic acid) and chlorogenic acid-related compounds with large amounts of antioxidant components (see Oligashi 2008:5; Kodama 2008:18-19), and the presence of Mannan oligosaccharides-food compound promote smooth functioning of the intestine (Kodama 2008). This is redolent of the health benefits of the consumption of the plant and thus the coffee bean is beginning to be a magnet for the production new brand commodities used in the prevention of adult disease (see Oligashi 2008:5; Kodama 2008:18-19). Given the presence of diverse coffee varieties in Ethiopia, therefore,

there is a prospect to select the cultivar with high contents, which would assist the discovery of modern medicines with health attributes.

The consumption of an infusion prepared from yellow coffee leaves, roasted on a griddle (*bune-midado*) and powdered using pestle and mortar, is common among the Kafecho. Since the powder is boiled with other spices mainly ginger, pepper (*mitimita)*, *bäsobila* (*käfo/kafoo*), garlic and salt, the people use the decoction to treat flu. Some of my informants also declare the use of the drink from coffee leaves mixed with sugar as a treatment for anemia. The Majangir generally exploit a wide variety of resources for multiple purposes. In view of that, Stauder (1968:48; 1971:24) tells us that the people used wood-ash to make poor quality salt, laterites to make red cosmetics, and saps for medicinal purpose. In the ethnographic present, a potion prepared from coffee-powder, mixed with edible oil and salt, is consumed to treat stomachache, particularly dysentery. In some cases, *kari* prepared with concentrated chili pepper (*mirmitak*) is drunk by individuals infected with malaria to boost appetite. The fact that *kari* constitutes plants traditionally acknowledged for their medicinal values indicates that the drink is of potential significance in treating stomachache and flu. Views from some-non Majang inhabitants of Teppi consuming the drink accord with the above conjecture. The health benefits of *kari* could even go beyond those mentioned earlier owing to the use of different spices as its constituents. Shirin and Jamuna (2010) support the above postulation on the medicinal value of spices on the ground that they constitute anti-inflammatory, antiviral and anti-cancer properties as well as the benefit of preventing heart problems.

10.5. Comparing Coffee Consumption Traditions among the Kafecho, the Majangir and the Oromo

The preparation and consumption of coffee among the Kafecho, the Majangir and the Oromo in southwest Ethiopia is characterized by certain similarities and differences. While the Majangir do not use any industrial products in preparation and consumption of *kari*, the use of such common cultural materials as the coffee pot -the absence of which contradicts the traditional ritual, the coffee roasting-griddle, the mortar and pestle and the coffee tray are essential for the Kafecho and the Oromo. Two non-earthenware coffee cups, the *tinjano* and the *qulu* constitute two typical cultural materials used by the Kafecho and the Jimma Oromo respectively.

Table 10.2. A comparative synoptic summary of materials used during the preparation and consumption of coffee and *kari.*

	Preparation stage	Consumption stage
Kafecho	a. Coffee pot- *bune- qondo* b. Coffee roasting stick - *bune-shurko* c .Bowl shaped wooden tray- *gäfeto* d. Mortar-*bune-boto/bune-botende* e. Pestle- *boti-busho/ bote-busho* f. A ring like stand for coffee pot-*bune-qedo* g. Coffee roasting-griddle-*bune-midado.*	a. Coffee pot-*bune-qondo* b. A ring like stand for coffee pot-*bune-qedo* c. Chinese cups-*bune-sinno* d. Coffee cups made of bamboo-*tinjano(dollo)* e. Incense burner- *gocho* f. Coffee serving tray-*tinjano-koto*
Majangir	A. Kari-pots: *kebet-karionk and kebet-sid'anonk.* B. Basaltic pebbles*: jämänonk* and *giyanonk.* c. *Gäbätoy* and a wooden chopping board. d. A broken pot to process pepper (*mirmitakon*).	a. *Kari* cups-*mätägoy* b. Laddle made of calabash-*gote* c. Filtering funnel-*sote* d. *gäbätoy*
Jimma Oromo	a. Tin plate -*ele-sibila* b. Small griddle-*ele-bicu* c. Roasting stick- *akkoftu buna* d. *Gäbäte* e. Wooden mortar- *moyye-buna* f. Wooden pestle- *bokku-buna* g. Coffee pot-*Jäbäna qahwa* h. Ring shaped stand- *batu-jäbäna.*	a. Coffee pot- *jäbäna-qahwa* b. A ring like stand for coffee pot- *batu-jäbäna* c. Chinese cups- *shini* d. Coffee cups made of calabash-*qulu* e. Incense burner-*girgirta*. f. Coffee serving tray- *gäbäte-shini.*

The study of coffee consumption demonstrates how the construction of identities, for instance, gender relations, is established through the beverage. In this context, the link between women and coffee preparation is frequently reflected in the construction of their own identity, to such an extent that women themselves are defined by this practice and the transmission from mother to daughter of knowledge concerning the coffee ceremony. Akin to many of the culinary activities at a household level, women are fully responsible for the preparation of coffee. In this, there is an opportunity for female children to learn the art of preparing coffee and the cultural transmission lies in the daily rituals of coffee where children not only

get acquaintance with the preparation, but also assist their family and grow learning stories and social memories. Coffee also promotes interpersonal relations and harmony within a family and community.

Although coffee prepared at home is shared with family members, immediate neighbors and guests, the coffee ceremony in the study areas can be considered as "a special time for women'' (see, Brinkerhoff 2011; Yades *et al.*2004). This is because women not only get time to meet and to relax, but also to discuss important matters. Brinkerhoff's (2011) idea that the coffee ceremony reflects the gender role in the preparation and consumption of coffee also holds true for the study area where these gendered roles are reproduced within the context of the coffee ceremony.

Table 10.3. A comparative summary of gender based involvement in the processing and preparation of coffee and *kari.*

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		Kafecho		Majangir		Oromo	
		M	F	M	F	M	F
Coffee processing stages	I. Separating the hull from the bean						
	a. Pounding						
	b. Grinding						
	II. Winnowing						
	III. Sorting						
Coffee preparation	I. Washing coffee beans						
	II.Roasting coffee beans						
	III. Collecting roasted coffee						
	IV. Pounding roasted coffee						
	V. Boiling and serving coffee						

Male children who can assist in harvesting might grind roasted coffee although it is a rarity. A grown man's participation in the ceremony is limited to sharing experiences in life, partaking in discussions and conflict resolution. It should be noted that the gender relations that are established through coffee preparation and

consumption are one of a subaltern status for the woman: women have to work while men are served coffee and chat with each other. They are supposed to be good hosts, because this is how their value as women is estimated. Thus, the coffee ceremony is a way of showing women that they have to be humble, obliging and hard working and that they have to be at the service of others mainly men

Table 10.4. A comparative summary of gender based involvement in the preparation of *kari.*

		M	F
Stages in *kari* preparation	I. Aqusition of coffee leaves		
	II. Scorching coffee leaves		
	III. Boiling *kari*		
	IV.Flavoring		
	V.Distilation(*sid'an*) and serving *kari*		

Even though the coffee ceremony is not important for its dietetic value, snacks (for example, roasted or boiled grains or bread) prepared by women are enjoyed during the consumption. Sharing sustenance brings harmony. Since the preparation of the beverage is to create a milieu for socializing and communicating, it is hardly ever that a woman drinks coffee alone although the drink can be prepared on her own in anticipation of her spouse, neighbors or guests. The classic nature of the shared practices reflected in the preparation and consumption of coffee symbolize what Cole (2005:109) referred as a "culturally meditated, historically developing, practical activity'' which, in this context, the women preparing and consuming coffee recurrently engage in and pass on to female children who would start to practice and eventually prepare coffee themselves. Similar features in the consumption of coffee in southwest Ethiopia also include the role of the beverage in such social events as reconciliation, communal works organized during ploughing and harvesting seasons and during post funeral gatherings.[163] From cultural perspectives, the role of coffee in rituals has different faces among the Kafecho, the Majangir and the Oromo. While the Majangir in the study area have kept only a recollection of the use of the coffee plant as an offering to

[163] Following a funeral ceremony, it is customary for inhabitants of an area to express their condolences to the family members and relatives of the deceased for three to four days during which coffee is prepared and served to the people gathered in the compound of the deceased.

spirits called *Doqtan* and *Rähawa*, the Kafecho and the Oromo have continued to use coffee in different forms of rituals. Unlike the Kafecho and the Majangir, the *bunä-qäla* still plays a considerable role in the coffee consumption culture of the Oromo. Among the Oromo of Gomma, for instance, the use of the practice is twofold: in the thanksgiving ritual after the birth of a calf, and during marriage arrangements. As we have seen, in the preceding sections of this chapter, prayers and blessings are central to coffee ceremony and significantly unique to the Oromo who often make use of a great deal of prayers for forgiveness, good harvest, health and good weather. According to Yades *et al.* (2004), the Oromo prayer for peace is a prayer for the whole world.

The consumption of coffee illustrates an excellent example of daily commensality, which is continually reinforced through a social practice. Coming together around coffee is not only restricted to the act of consuming the beverage, but also to the entire social act, from presentation of the beverage to the seating and serving order, the materials involved, time of the day, conversation, aroma, smells, sounds and tastes. All these contribute to what Susan Pollock (2012:3) describes as "the perpetuation of as well as changes in social constellations and political relations." Besides, the role of food consumption in determining social relations, for example between the guests involves social obligation and a mechanism for change (Dietler and Hayden 2001). Thus, the consumption of coffee, in the context of daily commensality, is obviously about creating and buttressing relations. In the process, there develops a social obligation between households sharing coffee as attending coffee ceremonies of the host becomes an obligation of the neighbors, who during the communal occasions, are seen as "guests." The consumption of coffee also involves the embodiment of social norms that are ingested with the beverage. If coffee rituals entail continually reinforced sociality, how does the process of this socialization occur?

Understanding the time, the place, the reason and the circumstances under which coffee is prepared and consumed is fundamental to recognize the formation and consolidation of relationships and the construction of personal and collective identities. Through coffee consumption networks, personal relations are created and maintained and social bonds are constructed and expressed. Among the Majangir, for instance, common coffee (*kari-omong*) entails the notion of neighborhood. *Kari-omong* constitutes an important part of the ideals of sharing, a motive for aggregating homesteads. *Kari* is shared by members of immediate neighbors (*olakak* or *shakom*- terms used to indicate neighborliness in northern and in southern Majangirland respectively). Since *kari* is the most frequently shared item and is a pretext for visiting (see

Stauder 1968; 1971), the number of people sharing the beverage could get bigger on different occasions to embrace other individuals, for instance guests and homesteads, especially during such social gatherings as communal work (*dado*) and post funeral gatherings.

The way coffee is prepared and consumed both generates and expresses social belongingness as well as differences based on gender, class and age. In relation to class, social roles are played out in the presence or absence of members of one social group in the coffee ceremonies of other groups: thus, the fact that members of artisan "castes" are not invited to ceremonies hosted by the dominant group is a way of buttressing their marginalization. However, the coffee ceremony is also a cohesive mechanism within any given community. Coffee expresses sociability and hospitality; sharing coffee creates a group sense of communion. Nonetheless, strangers are not invited to consume coffee, since nobody can darely and instantaneously socialize with aliens. Likewise, members of subaltern clans in Kafa and occupational castes particularly potters in Kafa and Jimma are not invited to coffee ceremonies hosted by the other clans. In this regard, coffee is used in what sociologists call "boundary marking." In the context of Romero's (2011) notion of the creation of communal identity, coffee consumption produces a feeling of cohesion and views of a shared understanding on secular matters and the supernatural through rituals, solidarity feasts and work feasts. Female activity consisting of coffee processing and consumption is essential for any form of banqueting. Consumption takes place in a context of socialization with one's peers, since the socialization of children does not only take place in a productive context. Female children are not only taught to do things relating coffee preparation but learn to assume certain status and gender roles at a younger age.

CHAPTER 11

VARIABILITY IN COFFEE RELATED POTTERY AND THE CHAÎNE OPÉRATOIRE IN PRODUCTION

11.1. Pottery in the Archaeological Record

From an archaeological perspective, our knowledge on the occurrence of the earliest pottery in both highland and lowland Ethiopia is scanty (Finneran 2007:59). In this context, the earliest pottery known, so far, comes from Gobedera rock-shelter, which dates to 6,875±165 bp (Finneran 2007; Phillipson 1993). In southwestern Ethiopia, the earliest archaeological research to yield ceramic is attributable to the work of Bailloud (1959), in which pottery was identified along with ground-stone hoes, but it remains to be undated. In recent years, we know from archaeological research at Kumali and Koka rock-shelters in Kafa that pottery is no older than 2,000 years in the region (Hildebrand *et al*. 2010: 281,283). Kafa's earliest pottery is also considered contemporaneous with that from Moche Borago[164] rock-shelter dated at 2285±80 BP (Guther *et al.* 2002). The major decorations of these early ceramics from Kafa are incision and impression, with surface treatment including smoothing, polishing and slip. They show no clear similarities with other pottery traditions in Ethiopia (Hildebrand *et al*. 2010). In Western Ethiopia, excavations at the site of Bel-K'urk'umu rock-shelter in the Benishangul-Gumuz region yielded pottery radiocarbon-dated between 5000 and 4500 BP. Major decorative motifs typical of the Bel-K'urk'umu sherds include wavy line incised motifs and rocker-impressed points, including the range of packed and spaced zigzags distinctive of pottery from Mesolithic (Early Khartoum) dated to about 8000–6000 BP (see Fernández 2003; 2003b; 2003c, Fernández *et al*. 2007; González-Ruibal 2005). Some productions also have close parallels to the Neolithic (Shaheinab-Jebel Moya) in the Sudan (Fernández 2003a:255-257, Fernández *et al*. 2007:111). The arrival of pottery in the region is, thus, attributed to the onset of arid conditions of the mid Holocene that forced *"aqualithic"*[165] groups of early food producers to move to relatively moist parts and hence to western

[164] The rock-shelter is located about 200 km east of where the Kafa Archaeological Project was carried out (see Hildebrand *et al*. 2010).

[165] '*Aqualithic*' is a term coined by John Sutton referring to an early ceramic cultural complex employed in riverine and lacustrine settings between Senegal in west Africa to Kenya in the east in the period 10,000 -4000 BP. The cultural materials consisted of bone harpoon and pottery traditions characterized by weavy and dotted weavy line motifs (Sutton 1977).

Ethiopia (Fernández *et al.* 2007). Notwithstanding the meager archaeological research in southwest Ethiopia, the recent archaeological data from Kafa indicate a late occurrence of pottery in the region compared to northern, western and central Ethiopia, and the adjacent region to the south (Kenya), where the appearance of pottery is traceable to 8000 BP. The presence, to a certain degree, of resemblance in some attributes of excavated sherds and modern pottery noticed by Hildebrand and her colleagues calls for ethnoarchaeological studies in Kafa that would eventually help to determine the extent of continuity in local pottery production (Hildebrand *et al*.2010).

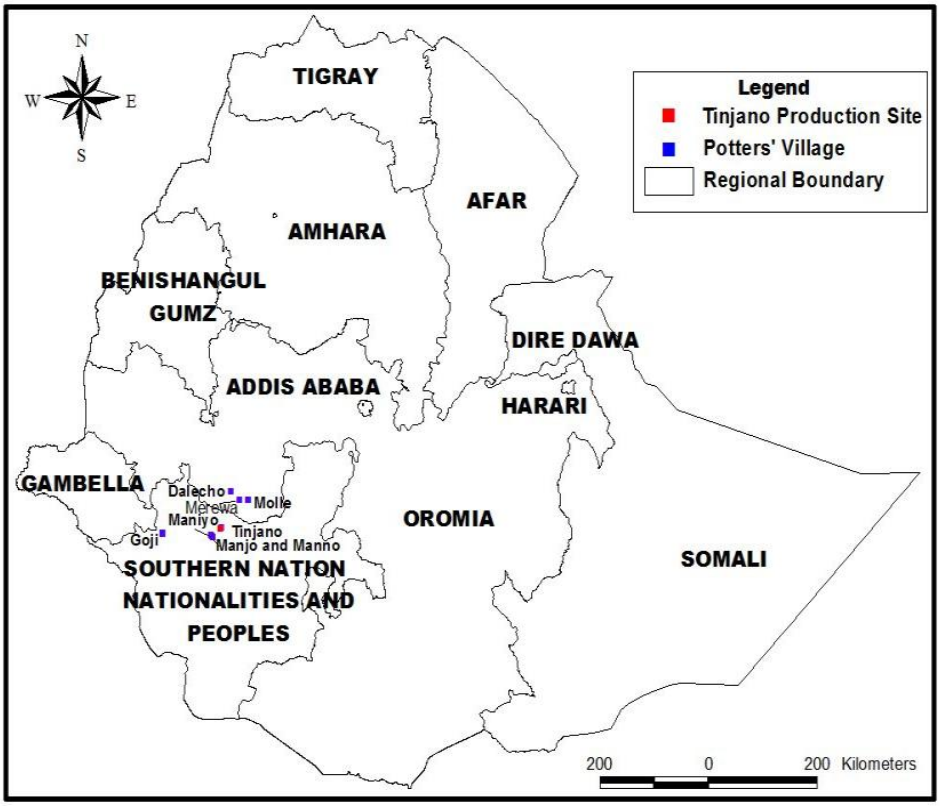
While the archaeological occurrence of coffee bean fragments from Kumali at a level above 1740 BP (see Hildebrand *et al.* 2010) is considerably interesting, none of the excavated sherds from Kafa are reported as representing part of anything that could be interpreted as a coffee pitcher. Perhaps, the earliest archaeological occurrence of what appear to be coffee pots and *injära* trays (griddle) in Ethiopia is traceable to the late Aksumite times (Wilding 1989). Phillipson (2001:354) presumes that the coffee pitcher and the *injära* trays examined by Wilding were introduced to either Aksum by about the 6th century AD or "perhaps less likely that they were enjoyed in early times but with metal utensils, which were replaced with pottery once the states prosperity declined." Note should be made, here, that the design and types of the earliest pots in Ethiopia reveal a high degree of local innovation (see Barnett 1999b:115-116). The following sections of this chapter deal with the production of pottery relating the processing and consumption of coffee in the study area.

11.2. Pottery Production in Southwest Ethiopia (Kafecho, Majangir and Oromo)

As in other traditional crafts, potters in southwest Ethiopia produce low-fired, unglazed, and relatively coarse pottery vessels used for storage and cooking (see for instance, Arthur 1997; 2002; 2003; 2006; 2013; Bula 2006; 2008; 2010; 2011; Kaneko 2006; 2007; 2009). Likewise, potters in the study areas produce a variety of pots for storage, cooking, and consumption purposes. Even though coffee-related pots common to all include coffee pitcher and coffee roasting-griddle known as *bune-midado*, *d'äyen-mu'eko* and *ele-bicu* among the Kafecho, the Majangir and the Jimma Oromo correspondingly. All potters in the study areas fire pottery products using the open-air (bonfire) technique, which Rice (2005) regards as the most difficult to control because of wind and irregularities in fuel combustion. Consequently, the atmosphere of firing is an important factor influencing several properties of finished products chiefly color and hardness

but also porosity and shrinkage. Given the fact that coffee consumption in Ethiopia in general and southwest Ethiopia in particular is closely connected with pottery products, the study of the range of pottery products used in the preparation and consumption of the plant and the potters who turn clay into artificial stone becomes an appealing subject.

Akin to most parts of Ethiopia, coffee pots and incense burners represent the two principal cultural materials accompanying the coffee ceremony among the Kafecho and the Oromo. The Majangir use two globular pots (*kebet-sid'anonk* and *kebet-karionk*) in the preparation of *kari*. As we have seen, coffee prepared from beans has recently joined the coffee consumption habit of the Majangir. There is also an extant variation in the degree of consuming the beverage among individual Majang households. The predominance of *kari* pots in Majang households over coffee pitchers partly explains the typical nature of the consumption of *kari* compared to the beverage prepared from coffee beans. The production of incense burner is uncommon among Majang potters because the burning of incense is a rarity for ideological reasons. As in many parts of the world (see for instance, Nicklin 1979; Rice 2005), the presence of large deposits of surface clay is a major factor for settlement of potters in southwest Ethiopia.



Map 11.1. Sites of pottery and *tinjano* production.

The ethnoarchaeological investigation among the Kafecho, the Majangir and the Oromo reveals that the material culture relating to the production and the consumption of coffee in the region is characterized by certain similarities and differences attributed to environmental and cultural reasons. The social position of potters, among these communities, excepting the Majangir, falls within the lower stratum of the caste system manifested in three major spheres: secluded settlements, a certain degree of exclusion in communal activities and marital relations. The chapter also furnishes evidence on the social position of potters and their relations with non-potters within the social setting in which they live and produce pots much in demand by their non-potter neighbors. The central concern of the subsequent topics includes, but is not limited to, explicating the variability in pottery, the *chaîne operatoire* of the production and the social position of potters. In this context, therefore, emphasis is given to the technology of coffee-related pottery beginning from resource acquisition, molding, drying, and firing techniques and post firing treatment.

11.2.1. Kafecho

Historically, the social hierarchy of the Kafecho comprised of the higher clans (*ogge-ashi yäro*)-the political dominant section of the people, the lower clans (*gishi-ashi-yäro*)-tenant farmers and the stigmatized minorities (*shärare-yäro*)-artisans and hunters. In the last group are low status occupational castes, smiths(*q'emo*), weavers(*shämano*), potters(*qäjäče*),tanners(Manno) and hunters(Mänjo). Unlike the kingdom period, the degree of marginalization of two of the low status occupational casts, smiths and weavers, has changed significantly. For instance, smiths, though few in number, live intermingled with the rest of the population. Likewise, weavers are no more despised and their occupation is not any more associated with specific clans as any farmer can become a weaver and members of the traditional weaving clan live among farmers and cultivate land(Gezahegn 2001:82).

The study of pottery (*qeto/qeeto)* in Kafa was conducted among three different clans of the Kafecho: Mänjo, Manno and Mäniyo potters living in the districts of Decha and Adiyo. Unlike weavers and smiths, the social situation of these subaltern clans, who still live in the outskirts of settlements seen as areas prone to such crop destroying animals as monkeys, baboons and porcupines, has not changed over the years. I will discuss the social position of the three subaltern clans in the latter part of this chapter.

Potters in the study areas produce a range of pottery products of which coffee roasting-griddle (*bune-midado*)*,* coffee pot (*bune-qondo*), cooking-pan (*dišto*)*,* incense burner(*gocho*) and water jar

(*gombo/gomboo*) can be cited here as examples. The presentation here accentuates on the materials used and techniques involved at various stages of production by potters of the three clans.

A. Pottery among the Mänjo

The Mänjo are one of the subaltern clans in Kafa. Men, though hunters in early times, are farmers in modern days. While the Mänjo claim that all their men posses the knowledge of hunting, only a few of them practice it today. Pottery is the occupation of women who produce a variety of pottery products of which coffee pot (*bune-qondo*), coffee roasting-griddle (*bune-midado*) and incense burner (*gocho*) are used during the preparation and consumption of coffee. Potters (*qäjäče*) often acquire clay from the nearby areas and keep it in a sack placed nearby the production site, which is also closer to the place of firing. Clay is the chief resource required in manufacturing pottery. The availability of raw material for temper is an equally important additional factor. Even if both aspects largely hold true for potters in the study areas, there are extant variations relating to the distance between the manufacturing site and clay source. In fact, plasticity -the property that allows shaping the wet clay by pressure- is an important factor in the selection and use of clay by modern day potters (Rice 2005). The same can be said of potters' interest in selecting clay amid Kafecho, Majangir and Oromo potters. Mänjo potters in the vicinity of Mankira acquire clay from closeby areas. They often travel 10 to 15 minutes in a round trip to transport clay. The quarry is mostly located in forests between coffee farms or backyards.

Figure 11.1. A Mänjo potter quarrying clay in the forest.

A potter's quarry is mostly a matter of secrecy. A potter often does not show the clay source to other potters in order to exploit the clay for a long period. On the morning of the day of production, potters grind coarse sized clay with a wooden log (*qudo/qudoo*). The clay is mixed with water and straw of *ʈef (gäsho)* on *šišo-ʦaqo* (*shiishoo-xaaqoo*), a flat stone on which a paste (*nuqo/nuqoo*) is prepared. Mänjo potters use the term *ga'ewocho* (*gaa'ewochoo*) to refer to the overall process of smoothing the clay. In the process, potters remove dirt (*mäďo/madhoo*) from the straw as it could result in cracking up during the production of the pots. They prefer to mold pots in the morning hours of the day when the sun is not overhead.

Figure 11.2. The preparation of paste (*nuqo*) by pounding clay using a wooden log (*qudo/qudoo*) and a flat stone (*šišo-taqo)* and mixing the wet clay with straw.

Figure 11.3. Paste covered with leaves of *ensät* to keep it wet.

The Production of Coffee Pots (***Bune-Qondo***)

Stages in the production of coffee pots involve rounding the paste to form a ball-shaped lump and resting it on a broken part from the base of a certain pot – *tito*(*tiitoo*)[166] used as a turning device or a piece of *ensät* leaf overlaying a small hole. The paste is opened wider using fingers while one hand inspects the shape of the base of the coffee pot as molding the body of the pot progresses. Potters enlarge the body by adding coiled paste (*caco/caacoo*). They form the neck by adding *caco* in a circular manner following the thickness of a piece of stick inserted in the paste. Coiling is a very common technique whereby coils- ropes, rolls, or fillets of clay- are built up to establish the vessel circumference and gradually increase the height (Blandino 1984). Similarly, the handle of a coffee pot (*cändo/candoo*) is molded using coiled paste.

While molding the body of a coffee pot (*bune-qondo*), potters do not smooth the interior part, but only level it by scrapping the paste on the thicker part using the edge of *heto*[167](*hetoo*), the edge of a piece of bamboo. Potters also use *heto*, or *hoqo* (*hoqoo*), part of the stalk from banana tree to smooth the exterior surface of the pot. As potters smooth the pot, they hold the interior part with one hand while the other hand

[166] There is also a conspicuous variation in terms of the size of the *tito* depending on the type of pot a potter intends to produce.

[167] *Heto* can also be made from a broken *tinjano*.

polishes the surface from the exterior; each time they do the same process, they moisturize the *hoqo*. As potters smooth the exterior and build the body, they add on coiled paste and rotate the *tito*. In the production process, potters also use *shato* (*shaatoo*)-a broken pot used to contain water from which they moisten *heto* in the process of smoothing a pot. After the coffee pot dries, they coil and mold *cändo*, the handle of a coffee pot, and smooth the surface using *heto* or a piece of hard plastic. To smooth the mouth of a coffee pot, potters make use of *wälo* (*waloo*)*,* leaves from *ensät* or banana tree. They usually smooth the base of the pot using *heto* or *wälo* after the pot dries in three to four hours. After smoothing the base, they dry the base by resting the coffee pot sideways or with its mouth turned down and its base facing the sun.

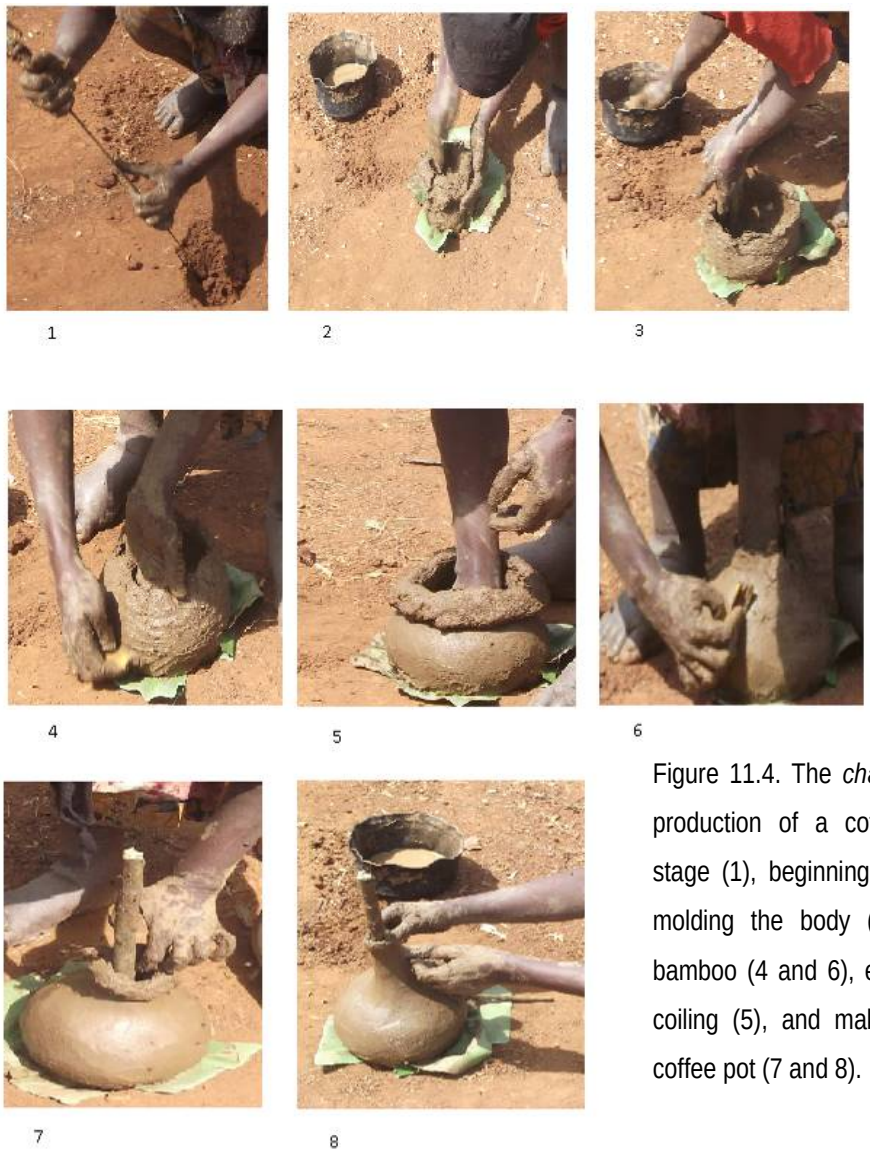


Figure 11.4. The *chaîne opératoire* in the production of a coffee pot; setting the stage (1), beginning to mold the pot (2), molding the body (3), smoothing using bamboo (4 and 6), enlarging the body by coiling (5), and making the neck of the coffee pot (7 and 8).

Decorating pots takes place after the level of moisture plummets with exposure to the sun. Mänjo coffee pots are habitually plain lacking elaborated decorative motifs. If otherwise, potters employ two typical techniques up on decorating coffee pots (*bune-qondo*): incision and rippling. They decorate the base of the neck and the part of the body close to the spout with circular coils often marked with slanting incisions produced using the edge of *heto* or pointed incisions circumscribing the upper part of the body. Up on incising the pots, potters use pieces of wood, edge of *heto*, a piece of wood from bamboo and the pointed end of snail-shell. Then, the pots are exposed to sun until they are ready for firing. Potters often polish the exterior surface of the *bune-qondo* using a small basaltic pebble known as *ṭaqo*, snail-shell or exterior of *heto*, a piece of bamboo. The amount of time required for potters to start polishing the exterior depends on the prevailing weather condition; though my ethnographic observation shows two to four days as sufficient for a coffee pot to fully dry under a sunny condition.

Figure 11.5. Decorating a coffee pot with the pointed end of snail-shell (left).Polishing the surface of a coffee pot with snail-shell (right).

The Production of Coffee Roasting-Griddle (***Bune-Midado***)

The *chaîne operatoire* in the production of coffee roasting-griddle (*bune-midado*) follows a rather different trajectory. Setting the stage begins by digging a circular spot and leveling the ground where production takes place. This is habitually in front of a living house or in backyards where firing pits are accessible. Potters lay straw of *ʈef* (*gäsho*) before shaping the griddle. They put the straw on the ground and place a ball-shaped paste on top.

Figure 11.6. Spreading straw on a leveled ground (left). Preparing a lump of paste to mold coffee roasting-griddle (right).

Potters start to mold the clay sideways from the center while inspecting the shape of the edge with their left hand. They use their right hand to flatten the clay sideways with a fist while controlling the shape using the other hand. Thinning the thicker part of the griddle at the center is done by scrapping. The scrapped paste (*nuqo*) is placed on the griddle being molded for use in leveling the thickness by forming spores using fingers. The purpose of potters in forming holes at the upper surface is to check uniformity of thickness or check irregularities. Potters habitually use *omo* (*omoo*) -a stem from a branch of *ensät* in order to smooth and beautify the upper surface of the griddle and the edge. At this stage of production, the griddle is exposed to the sun.

Figure 11.7. Baking the plate (left). Leveling the griddle by scrapping the surface of griddle (right).

Figure 11.8. Smoothing the plate (left). Sun drying pots (right).

Once the moisture level drops, potters keep the griddle at home during night and dry them under the sun during the day. The time required for drying varies depending on the prevailing weather. In dry season, a pot dries between three to four days while ten to fourteen days might be required in cloudy and rainy periods of the year. Unlike coffee pots, potters polish only the upper surface of the coffee roasting griddles to produce dazzling surface before they are fired. At this stage, potters employ a basaltic pebble (*ṭaqo/xaaqoo*), a small bottle or snail-shell during the process of *yopo*(*yophoo*), polishing the upper surface and the edge of coffee roasting-griddle.

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Figure 11.9. A Mänjo potter polishing the surface of a coffee roasting-griddle with a small bottle before firing.

Firing Pots and Post Firing Treatment

Mänjo potters fire pots in *oppo* (*oppoo*), pits dug in an open air and either in front of a residential hut or in a backyard. The largest of the pits used by Mänjo potters in the study area measures 1.20 m wide and 0.16 m deep. Some Mänjo potters do not use wood of *doqma* (water berry tree)[168] to fire coffee pots and the coffee roasting-griddles, as they consider that a pot touched with a stick from a water berry tree would crack sooner. In firing pots, therefore, logs are laid along with leaves of *zämbaba* (*Phoenix reclinata*)[169] tree. Spreading straw over the pots being fired, and inspecting the firing process by opening a hole using a piece of stick allows combustion reaction. The overall firing process takes place within 45 minutes. Fired *bune- midado* and *bune-qondo* are taken out of a firing pit using leaf of banana or *ensät*. Well-fired pots turn to pale warm brown in color.

Figure 11.10. Open-air firing: Firing coffee roasting-griddle (*bune-midado*) and heating water jars (*aci-qondo/acii-qondoo*) and coffee pots (*bune-qondo*).

[168] Its scientific name is *Syzgium guineese* (Fichtl and Admasu 1994:371).

[169] *ibid*.232.

Figure 11.11. Fired coffee pot (*bune-qondo*) and coffee roasting-griddle (*bune-midado*).

Mänjo potters in the study area use *qopero* , wilted and dried leaves of *ensät* tree or *ekko*, liquid from *ensät* tree to burnish the surface of pots after firing by daubing the pot using fiber from the same tree(*yiyo*) or a piece of cloth; or even clean the surface with leaves before transporting them to the market.

Figure 11.12.*Yiyo*, fiber made from *ensät* tree (left) and the fluffy part of *ensät* tree from which *ekko* is produced (right).

Figure 11.13. Producing *ekko*, liquid from *ensät.*

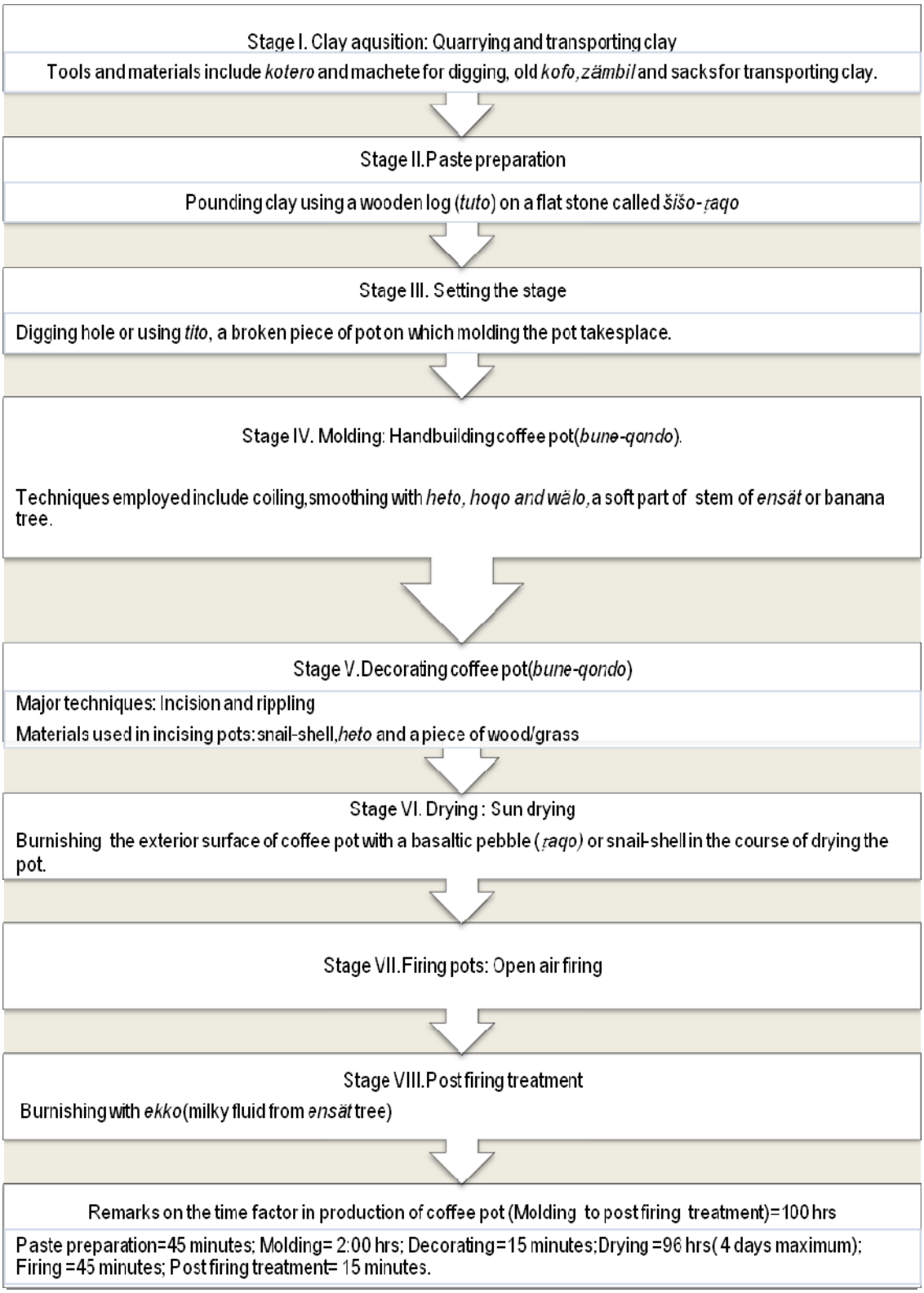


Figure 11.14. Sequential stages in the production of coffee pot (*bune-qondo*) among Mänjo potters.

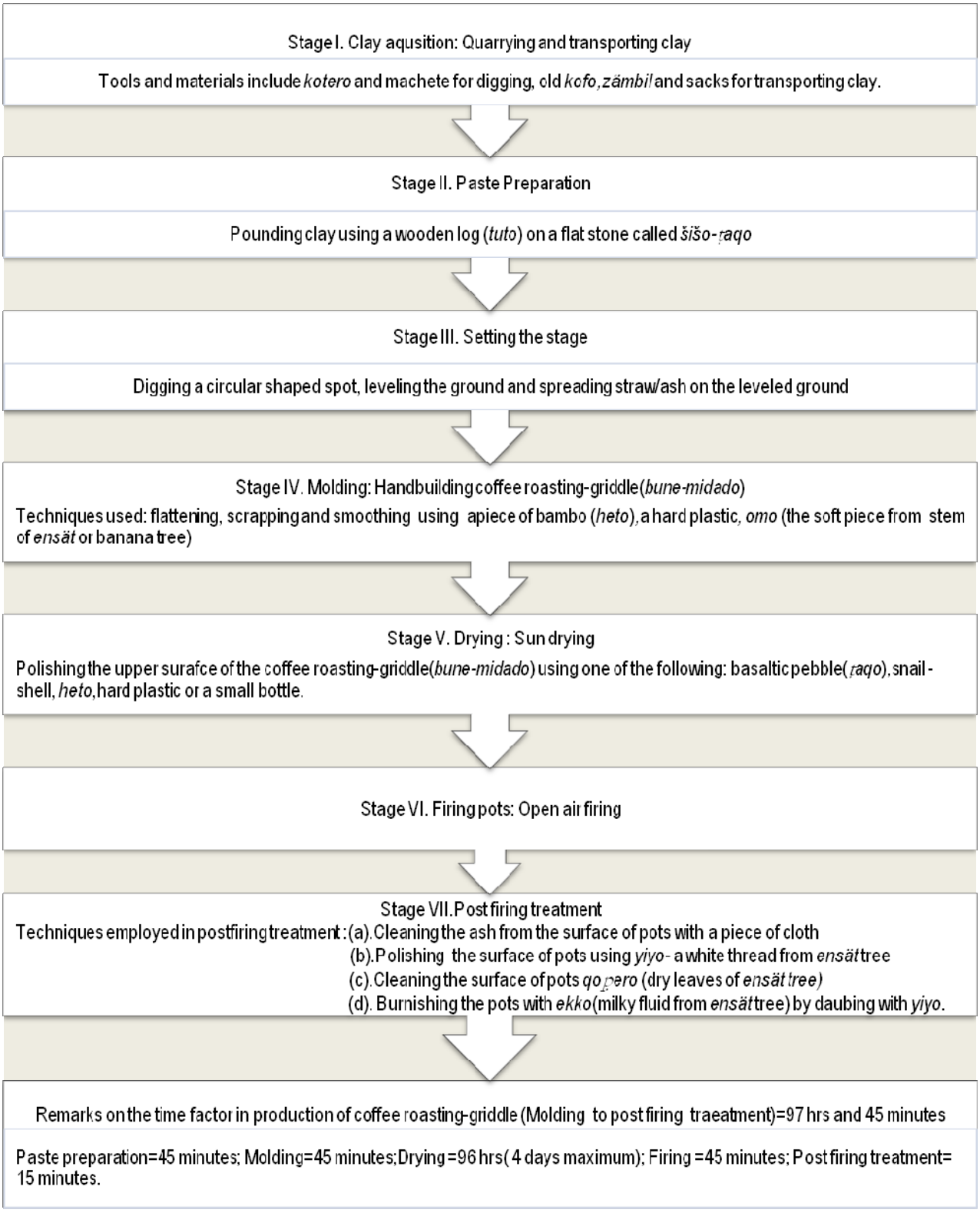


Figure 11.15. Sequential stages in the production of coffee roasting-griddle (*bune-midado*) among Mänjo potters.

B. Pottery among the Manno

The term Manno, in Kafinono, means hide-worker, a nomenclature given after the activity of men belonging to this clan, tannery. The Manno constitute another subaltern clan of the Kafecho. In ethnographic context, Manno men make saddles, child-carrying bags (*anqälbo/anqalboo*) and other leather products. Women make a range of pottery used for cooking and storage while their men, apart from their knowledge of tannery, practice agriculture including coffee cultivation. Men, support women in pottery by quarrying clay, produce wheat, sorghum, and *ŧef* (*gäsho*).

Pottery among the Manno is a skill acquired at an early age and most children learn how to make pots after the age of ten from their mothers. The production of pots often takes place under *ensät* or a tree nearby a house. Tools used in production of pots include *gocho,* a broken pot to hold water from which potters moisten *heto* in the process of smoothing a pot, the sole of a shoe (*came-solo/caamee-soloo*), and *mici-tuto* (*micii-tutoo*)-a wooden log used to pound clay. The forthcoming sections present the *chaîne operaitoire* in the production of coffee pots and coffee roasting-griddle.

Manno potters obtain clay from their surroundings. Quarrying clay is chiefly the task of potters although men can occasionally assist. Obtaining smooth, sticky and workable clay is often difficult, as potters have to travel to areas that take 30-60 minutes in a round trip. Like any other pots, the *chaîne operaitoire* in the production of coffee pot and coffee roasting-griddle begins by preparing moldable paste during the day of manufacturing the pots. Clay is mixed with water and straw of *ŧef*. In the process, potters pound the wet clay on a flat stone (*šišo-xaqo*) with a wooden log, *tuto*, to produce a soft moldable paste. Potters avoid any solid dirt (*maď o*) since its presence in the paste can cause cracking of pots after molding. Once paste is prepared, they start molding the pots.

Figure 11.16. A Manno potter preparing paste.

The Production of Coffee Pots (***Bune-Qondo***)

Stages in the production of coffee pots among the Manno is very much alike with Mänjo potters. It involves forming a ball-shaped lump and opening it up in to form a bowl shaped base of the pot. Then, the bowl shaped base is placed on a *tito,*[170]a broken part of the neck of a certain pot on which the molding of the coffee pot progresses. Like their Mänjo counterparts, Manno potters enlarge the body by adding coiled paste (*caco*). Manno potters do not use any material to smooth the interior of coffee pots. They only level the interior surface with their hand while molding the body. They form the neck of the pot (*qeto/qeeto*) by rolling coils of paste following the shape of the middle finger. After the moisture content of a new coffee pot starts to drop under the sun, potters shape the handle (i.e *cändo*) by attaching coiled paste to the upper part of the neck below the mouth and the central part of the body and, and smooth the surface using *heto,* the edge of a piece of bamboo or a broken *tinjano.* Smoothing the mouth of a coffee pot is done using *wälo,* leaves from *ensät* or banana tree. Potters use *heto,* a *hard plastic* or *hoqo* (*hoqoo*), part of the stalk from banana tree, to smooth the exterior surface of the pot. As potters smooth the pot, they hold the interior

[170] There is also a conspicuous variation in terms of the size of the *tito* depending on the type of pot a potter intends to produce.

part with one hand while the other hand polishes the surface from the exterior; each time a potter does the same process, she moisturizes the *heto*/ *hoqo*. While potters smooth the exterior and build the body, they add on coiled paste and rotate the *tito*.

Manno potters often smooth the base of coffee pots using *heto* or *wälo* after the pot dries in three to four hours. As potters smooth the base, they moisten the *heto* using water in the *gocho.* After smoothing the base, it is exposed to the sun by resting the pot sideways or with its mouth turned down and its base facing the sun. It could take two to three days for a coffee pot to properly and be ready for polishing. Manno potters often burnish the exterior surface of coffee pots with *ṭaqo*, a basaltic pebble, *heto,* a piece of hard plastic and snail shell. The process of polishing the surface of pots produces a shiny surface thereby avoiding irregularities and increasing the beauty of pots. Manno potters use the term *näsho* to the process of polishing pots. Some Manno potters decorate pots after the moisture content of a molded pots starts to drop. They use the pointed end of a small stone to decorate coffee pots to produce layers of circular impressions decorating the body of a coffee pot. Potters decorate pots after the completion of the molding and smoothing of the pot.

Figure 11.17. Molding the base of a pot (left). Handbuilding the body of a coffee pot on *tito* (right).

Figure 11.18. Leveling the interior of a coffee pot (left). Coiling to enlarge the body of the pot (right).

Figure 11.19.Molding the handle of a coffee pot (left). Decorating the pot (right).

The Production of Coffee Roasting-Griddle (***Bune-Midado***)

Manno potters produce coffee roasting-griddle (*bune-midado*) on a leveled ground covered with ash and straw of *tef.* The first stage in the production of this griddle is baking a lump of paste by spreading over the straw and inspecting the shape. Leveling the upper surface is often done by scrapping the paste and forming small holes with index finger to check the evenness in the thickness of the surface. Potters slap the molded paste to level the surface and this process of slapping is known as *täpo.* Then, they level the surface by scrapping the thicker part using *omo* (part of stem of *ensät* or banana tree). They fill the holes with paste and smooth the surface and edge of the griddle with hand and *wälo*, leaf of *ensät*. When the moisture content of a newly made griddle starts to plumate, potters smooth the upper surface using *heto,* a piece of bamboo, or a hard plastic. The baked griddle is left at the spot of production for two to three days until it dries. What follows is *yopo,* the process of burnishing the upper surface and the edge of the griddle by rubbing using a basaltic pebble (*ṭaqo*). This process of burnishing pots, *näsho* (*nashoo*), increases the beauty of the surface as it results in a dazzling surface following which the griddle is ready for firing.

Figure 11.20. Baking the coffee roasting-griddle (left). Inspecting thickness by the index finger (right).

Figure 11.21. Leveling the surface by refilling the holes (left). Smoothing the upper surface and the edge of the griddle (right).

Figure 11.22. Sun drying water jars (*gombo*) and coffee roasting-griddle (*bune-midado*).

Figure 11.23. A Manno potter polishing coffee roasting-griddle (*bune-midado*) with a basaltic pebble, *ṭaqo*.

The prevailing weather condition in the Mankira locality is a major factor that controls the time required for drying pottery products. In a sunny environment, coffee pots and coffee roasting-griddle dry faster in about three to four days, whereas up to two weeks might be required in cloudy and rainy periods of the year. This indicates complete drying of pots is a prerequisite before the firing stage.

Firing and Post Firing Treatment

Akin to the Mänjo, Manno potters fire pottery products including *bune-qondo and bune-midado* in bowl-shaped firing pits dug in backyards or closeby production areas. The largest firing pit identified during this ethnoarchaeological study is 1.30 m in diameter and 0.25 m deep. Firing often takesplace in the morning hours of the day when there is not too much sun. In firing pits, potters first lay bigger woods horizontally, then put the pottery products and cover them with leaves of *zämbaba* and *ensät* trees. Then, *shuto* (*shutoo*), dry grass obtained from the surrounding is used to cover the wood and set fire to start the firing process. Potters insert a stick in the firing pit to accelerate the combustion reaction by letting entry of oxygen. A potter could fire a maximum of 10 pots (*bune-midado* and *bune-qondo*) at a time a day or two before market days.

At the end of the firing process, potters clear the ash from *bune-midado* and *bune-qondo* using old pieces of cloth. They also clean the surface of these pots using *yiyo*- a white thread made of *ensät* tree and dry leaves of *ensät* tree (*qopero*) or burnish the pots with milky fluid from *ensät* tree (*ekko*). Some potters apply no post firing treatment except when the pots are for household use.

Figure 11.24. A Manno potter firing pots.

Figure 11.25. Cleaning pots with dry leaf of *ensät*.

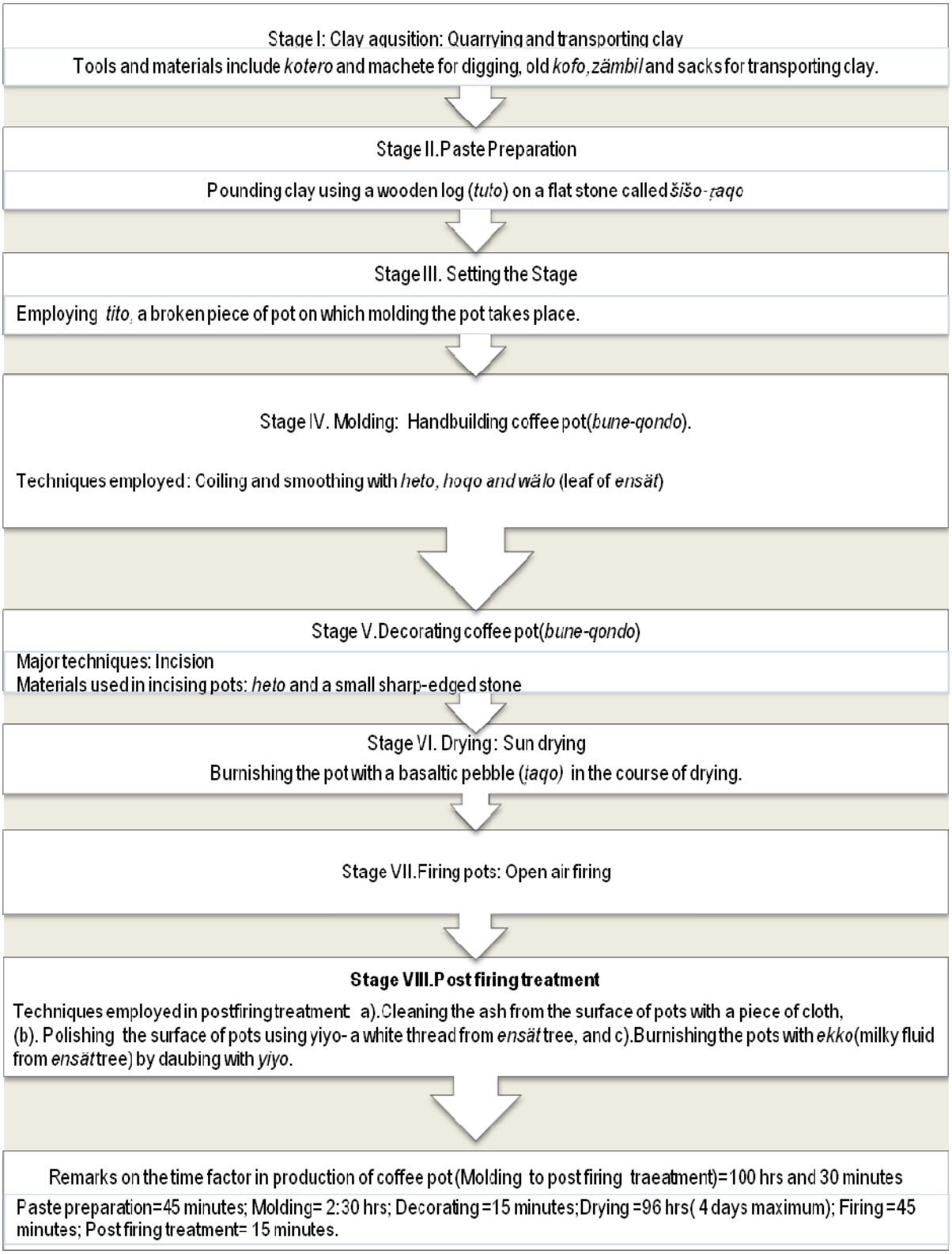


Figure 11.26. The *chaîne opératoire* in the production of coffee pot (*bune-qondo*) among Manno potters.

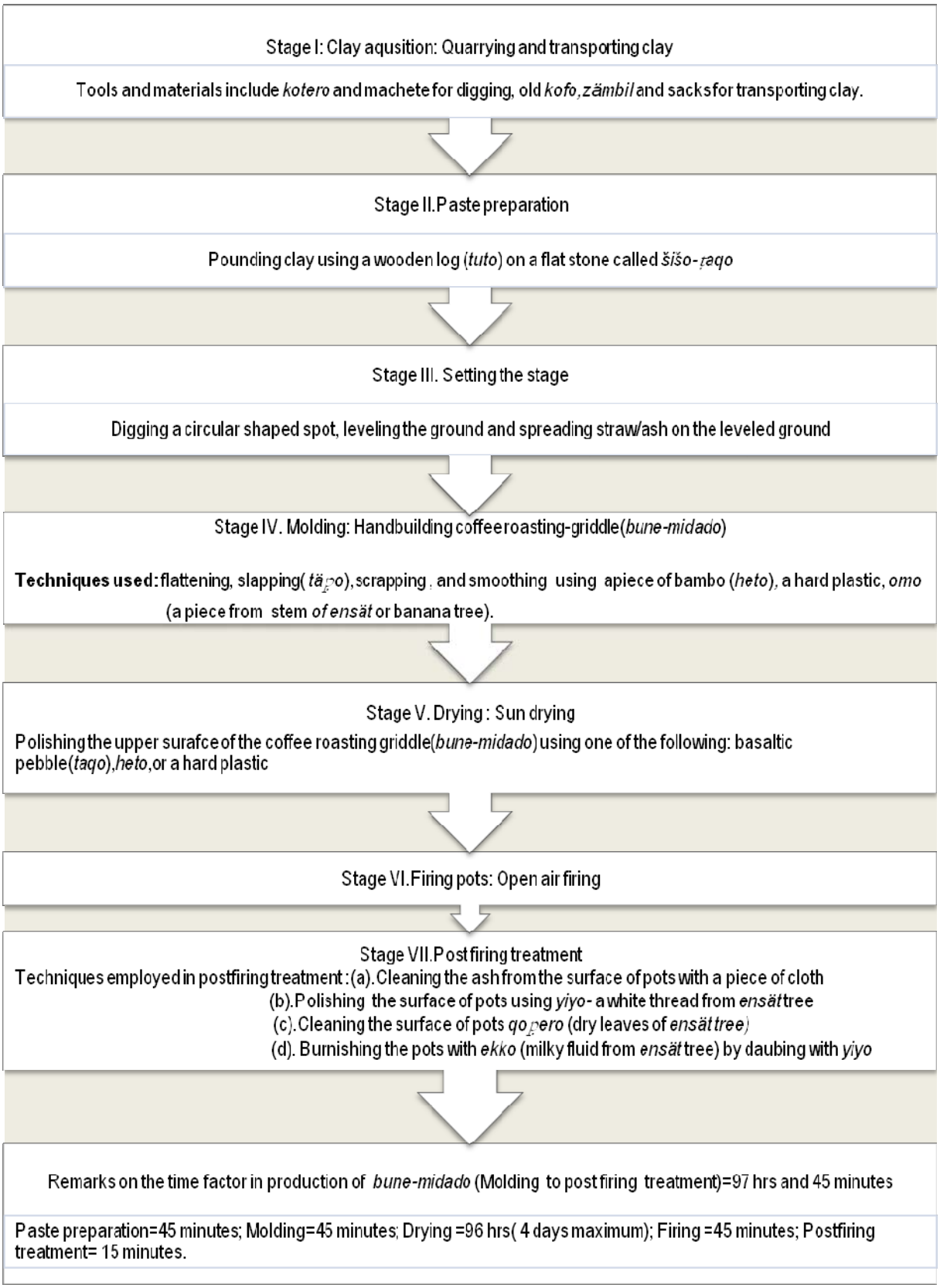


Figure 11.27. Stages in the production of coffee roasting-griddle (*bune-midado*) among Manno potters.

Pottery among the Mäniyo

Mäniyo women, like those of the Mänjo and the Manno, produce a range of pottery products. Coffee-related pots produced by the other two subaltern classes are manufactured by the Mäniyo of Boqa locality in the district of Adiyo. In relative terms, the degree of involvement of men in the production of pots among the Mäniyo is rather striking. Accordingly, Mäniyo men significantly involve in quarrying and transporting clay, helping women in firing, transporting and selling pottery products. The principal role of women is preparing paste and molding pots. Pottery production is an important, though not a satisfactory source of income, compared to the labor required. However, it is used as a means of supplementing income from agriculture. Of all potters in the study areas, Mäniyo potters produce the largest number of pots per day.

Mäniyo potters at Boqa obtain clay from a nearby area accessible in about five to ten minutes on foot from their village. The site lies in a low-lying area where both red and dark clay are quarried for the production process. Quarrying clay is a task done by Mäniyo men who make use of *kotero*, a composite digging implement consisting a bentwood attached to a metal sheath. Men habitually dig and transport both black and red clay types in sacks from the nearby quarry to compounds where as potters add more from the dark and a very small quantity of red clay while mixing it with silty straw of *ŧef* (*gäsho*) to prepare the paste. Like their Manno counter parts, Mäniyo potters use a piece of metal (*gitäro*), a basaltic pebble (*ṭaqo*), and a rubber sole of a shoe (*came-solo*) in the production of pots.

Potters often use red and black clay in pottery production. They mix a large proportion of black clay with a small amount of red clay. According to Mäniyo potters, the pot they produce is strong because of the black clay and becomes beautiful because of the red clay. They often share their knowledge on the techniques of pottery production to their daughters who after the age of ten could start practicing independently through mimicry and eventually become potters in a few years time. The absence of inter-clan marital ties and the presence of a conspicuous class structure within the three subaltern clans (Mänjo, Manno and Mäniyo) must have barred the possibility of learning the skills of pottery from one another.

Figure 11.28. Pounding clay with a wooden log (*dullo*).

Figure 11.29. Mixing the clay with straw.

Coffee Pots (***Bune-qondo***)

The first stage in the *chaîne operatoire* of the production of coffee pots (*bune-qondo*) is *gädäriyo* (*gadariyoo*), rolling the paste on the ground using one hand. Potters roll the paste with one hand and open a hole after which they remove wet clay from the base. They spread leaf of *ensät* (*wälo*) on the ground, place the paste being molded, and start thinning the interior by scrapping part of the paste while supporting the exterior with the other hand. Potters smooth the exterior surface of *bune-qondo* with *came-solo.*

Potters also polish the exterior surface of a coffee pot with the purpose of smoothing by using a piece of wet cloth. As potters perform *yopo,* smoothing the exterior surface of the pot, they move around the *bune-qondo* and smooth the part between the rim and the beginning of the body. Once the pot dries, which could take a day under sunny conditions, potters start working on the handle by coiling the paste between hands and attaching the coiled paste at the neck and the body of the pot after piercing and forming holes using the index finger. After two hours, potters form the base of the pot turning the flat base into a spherical shape by scrapping the dry circular edge of the base formed at the time of molding the body and the neck. Scrapping (*gito/gixoo*) of the dry part of the base is done using a piece of metal, often an old knife, known as *gitäro* (see figure 11.11). After the base dries, a second round smoothing (*yopo*) is done using a basaltic pebble, *ʈaqo,* which is also used to polish the base.

Figure 11.30. Tools used in pottery production: From left to right- *came-solo, ʈaqo* and *gitäro.*

Figure 11.31.Rolling the paste to start molding the pot.

Figure 11.32. Thinning the body at the molding stage.

Figure 11.34. Scrapping the base of a coffee pot with *gitäro*

Mäniyo potters often make both decorated and undecorated coffee pots. Decorating pots takes place after the moisture content of the new pot plumates by exposing the pot to the sun. Decorated coffee pots exhibit different designs produced by coiling a clay lump and rippling a belt-like circle on the body and incising geometric lines using *giṭäro* after the moisture starts to disappear in the drying process.

Figure 11.35. Decorating the body by rippling.

Coffee Roasting-Griddle (***Bune-Midado***)

Mäniyo potters start the manufacturing of coffee roasting-griddle (*bune-midado*) after pounding the clay with a wooden-log (*qudo*) and mixing the clay with silty straw of *ŧef (gäsho*) to prepare the paste. Molding the coffee roasting-griddle takes place on a leveled circular ground. Stages in molding the griddle are very much similar to that of the Mänjo potters, but the potters form the upper part by flattening the clay and inspecting the edge.

Figure 11.36. Smoothing the edge of a coffee roasting-griddle (*bune-midado).*

Unlike Mänjo and Manno potters, Mäniyo potters do not press the surface with fingers to check the uniformity in the thickness of the coffee roasting-griddle (*bune-midado*), but they flatten the surface using their hands and detect the variation in thickness in the process. Potters form the edge by moving hands around the molded paste in circular manner. Polishing *(yopo*) for *bune-midado* is done twice: first using *came-solo* in the process of drying the griddle to produce a smooth surface; and then using *ṭaqo* after drying to shine the upper surface.

There is, in fact, variability in the time required for drying pots. The prevailing weather condition is a determinant factor in this noticed variation. Accordingly, coffee pots and coffee roasting-griddles dry and get ready for firing in five days though drying might take more than a week in cloudy and rainy environments.

Figure 11:37. Drying coffee roasting-griddles.

Figure 11.38. Polishing the surface of coffee roasting-griddle using *gitäro*

Firing and Post Firing Treatment

Firing techniques used by Mäniyo potters is very much alike with their Mänjo and Manno counterparts although the time required for firing could well be regarded as the longest of all for they produce and fire pots far larger in number than the rest. Firing a large number of pots chiefly coffee roasting-griddles and coffee pots could take between 1:30 to 2:00 hrs. Potters often fire pots in pits dug nearby residential houses. Pits dug for open firing vary in size though the largest pit I have come across among Mäniyo potters is 2.30 m wide and 0.25 m deep. Firing pots is the responsibility of Mäniyo men, who begin firing by setting leaves of eucalyptus tree overlain by wood. The central difference in firing techniques distinguishing Mäniyo potters from Mänjo and Manno potters is the use of a broken *gombo,* water jar. The purpose is to support the coffee roasting-griddles which potters place around the broken *gombo* placed at the center of the pit. Then, potters place coffee pots in the pit and set on fire. They also add straw of wheat or sorghum, and leaves of *ensät* or banana (*wälo*) as the combustion progresses. Eventually, they cover the *wälo* with straw. Both coffee pots and coffee roasting griddles are taken out of the pot in a similar way as the Mänjo and Manno. Potters use both straw and liquid from *ensät* (*ekko*) in post firing treatment of coffee pots whereas they make use of straw to clean coffee roasting-griddles.

Figure 11:39. Firing pots: Setting before firing (1 and 2); the firing stage (3 and 4).

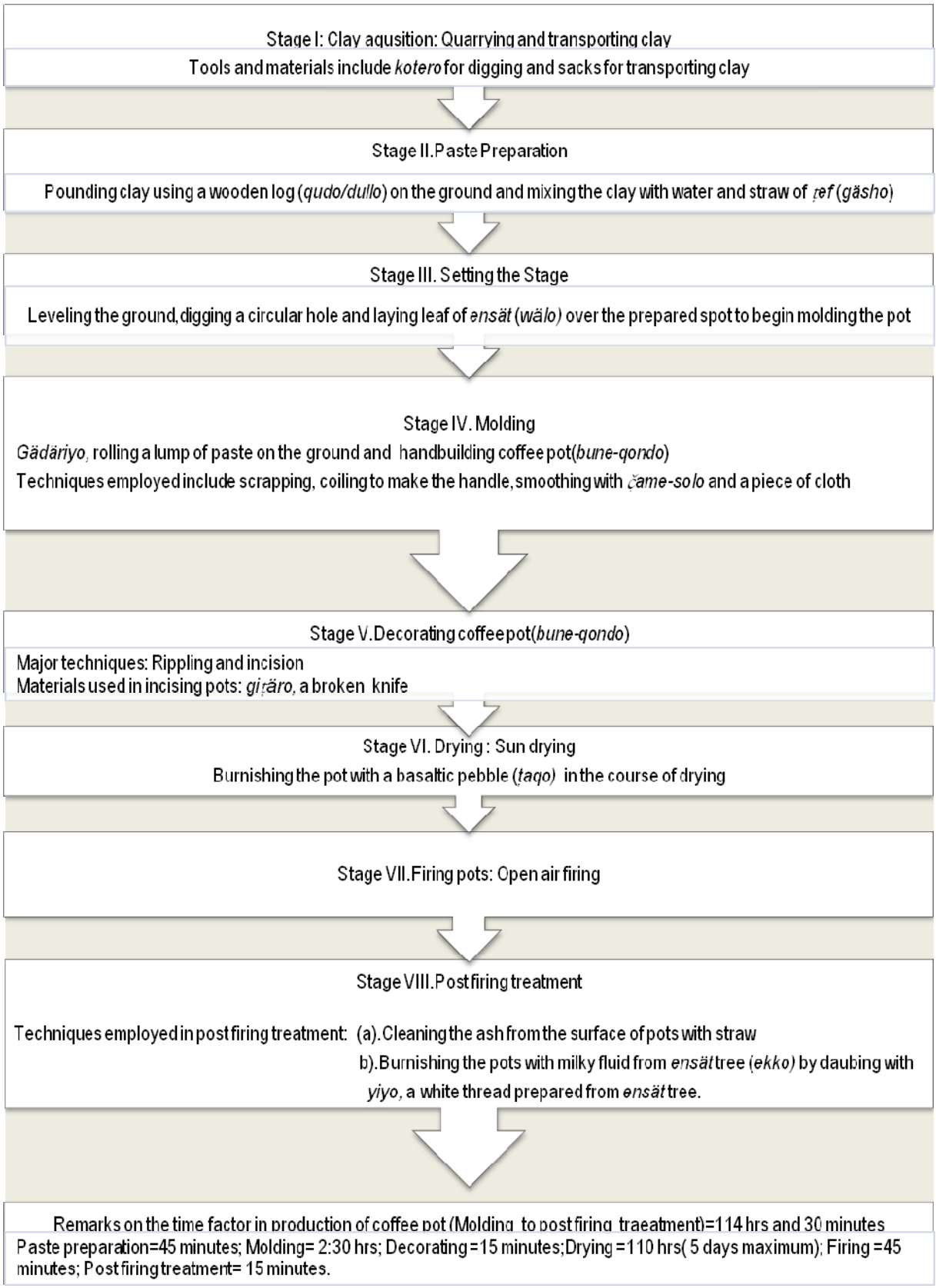


Figure 11.40. The *chaîne opéatoire* in the production of coffee pot (*bune-qondo*) among Mäniyo potters.

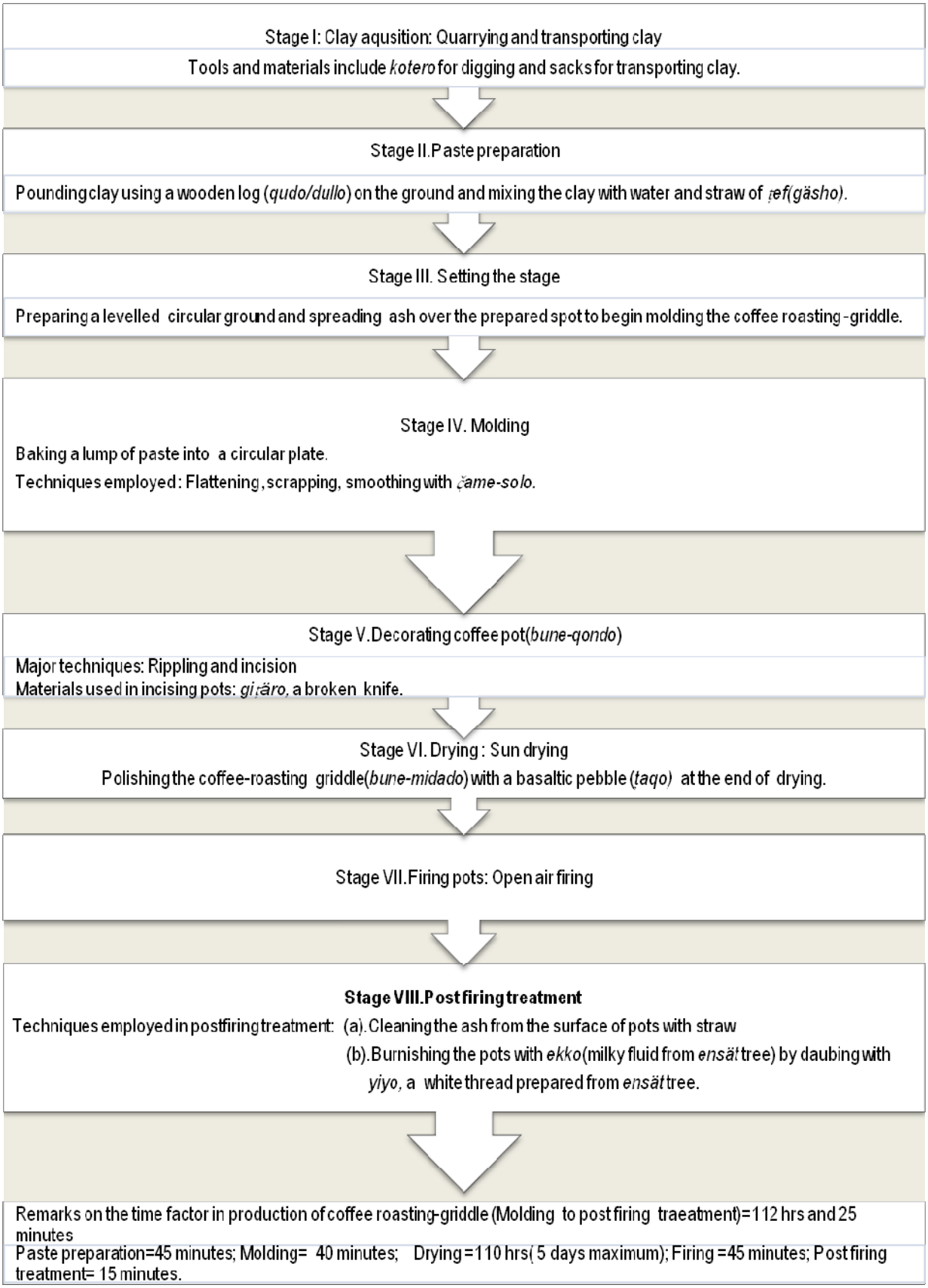


Figure 11.41. The *chaîne opératoire* in the production of coffee roasting-griddle (*bune-midado)* among Mäniyo potters.

Table 11.1. Comparing *chaîne opératoire* in the production of coffee pot (*bune-qondo*) among potters in Kafa.

Stages in the production of coffee pot(*bune-qondo)*			Mänjo	Manno	Mäniyo
I. Clay acquisition: Quarrying and transporting clay Tools and materials: Machete and *kotero* for digging, *kofo, zämbil* and sacks to transport clay					
Involvement in quarrying		Female			
		Male			
Stage II. Paste preparation: Pounding clay with a wooden log on a flat stone, *šišo-ʈaqo*; mixing the clay with water and daubing the wet clay with straw.					
III.Setting the stage: Preparing a small hole or using *tito*, a broken piece of pot on which potters mold the pot.					
Preparing a small hole on which the coffee pot(*bune-qondo*) is molded					
Employing only *tito* to mold the pot					
IV.Molding:Handbuilding the pot					
Techniques employed	Coiling				
	Smoothing				
Materials used	*Heto*				
	Hoqo				
	Wälo				
	Came-solo				
	A piece of cloth				
V.Decorating	Techniques	Incision			
		Rippling			
	Materials	Snail-shell			

		Heto				
		A piece of wood/grass				
		A piece of sharp stone				
		Iron(*giṭaro*)				
VI.Drying: Sun drying						
Burnishing up on drying	Materials used	*ṭaqo*				
		Snail-shell				
VII. Firing: Open Air firing		Preparing pits	Female			
			Male			
		Firing pots	Female			
			Male			
VIII.Post tfiring treatment		Cleaning the ash from the surface of pots with a piece of cloth				
		Cleaning the ash from the surface of pots using straw				
		Polishing the surface of pots using *yiyo*- a white thread from *ensät* tree				
		Cleaning the surface of pots with dry leaves of *ensä*t tree (*qopero*)				
		Burnishing the pots with milky fluid from *ensät* tree (*ekko*) by daubing with *yiyo*.				

Table 11.2. Comparing *chaîne opératoire* in the production of coffee roasting-griddle (*bune-midado*).

Stages in the production of coffee roasting-griddle(*bune-midado*)			Mänjo	Manno	Mäniyo
I. Clay acquisition: Quarrying and transporting clay Tools and materials: Machete and *kotero* for digging, *kofo, zämbil* and sacks to transport clay.					
Involvement in quarrying		Female			
		Male			
Stage II. Paste Preparation: pounding clay with a wooden log on a flat stone, *šišo-ṭaqo*; mixing the clay with water and daubing the wet clay with straw.					
III. Setting the stage: digging a circular shaped spot, leveling the ground and spreading straw/ash on the leveled ground.					
IV.Molding:Handbuilding the griddle					
Techniques employed	Flattening				
	Slapping(*täpo*)				
	Smoothing				
	Materials used in smoothing	*Heto*			
		Came-solo			
		Omo(stem of *ensät* tree*)*			
		Apiece of hard plastic			
VI.Drying: Sun drying					
Burnishing up on drying					
Materials used in		*ṭaqo*			

burnishing		Snail-shell			
		Heto			
		Hard plastic			
		A small bottle			
VI. Firing Open Air firing	Preparing pit	Female			
		Male			
	Firing pots	Female			
		Male			
VIII.Post firing treatment	Cleaning the ash from the surface of pots with a piece of cloth				
	Polishing the surface of pots using *yiyo*- a white thread from *ensät* tree				
	Cleaning the surface of pots *qopero* (dry leaves of *ensät* tree)				
	Cleaning the surface of pots with straw				
	Burnishing the pots with milky fluid (*ekko*) from *ensät* tree by daubing with *yiyo*.				

The *chaîne opératoire* in the production of coffee pots and coffee roasting-griddle among the three clans in Kafa exhibits a certain degree of similarities and differences. The major areas of similarities lie in the process of acquisition of clay and preparation of paste. The involvement of men in quarrying clay and firing of pots is almost the rule among the Mäniyo although a potter could be obliged to do these on her own if she is widowed and in the absence of a male family member.

Marked variations in terms of techniques employed during the production stages of coffee pots and coffee roasting-griddle are attributable to the peculiarity in pottery traditions of each of the potters' clan.

Commonality in the use of similar techniques is necessitated by an unavoidable technical need in the production process of the pots. The variation in the type of tools employed at any of the stages in the production of coffee related tools has to do with the presence or absence of material or a matter of choice for the intended technique. I will elaborate the details of these factors in the section comparing pottery tradition of the three subaltern clans.

Another striking difference in the pottery traditions in Kafa is related to the variation in the number of pots produced per day. The variation is indicative of the specialty of potters in the production of coffee-related pots and the role pottery plays in substantiating the economy of the three groups. The following table presents a synoptic summary of the number of pots produced by each groups.

Table 11.3. Estimates of coffee pots and coffee roasting-griddles produced by potters in Kafa per-day.

Potters in Kafa	Coffee pots (*bune-qondo*)	Coffee roasting- griddle (*bune-midado*)
Mänjo	1	3
Manno	1	4
Mäniyo	2	10

Marketing Pottery in Kafa

Pottery products sold at the Sunday market of Sänbäte in Mankira locality come from Manno and Mänjo potters. Coffee pot and coffee roasting-griddle along with water jar (*gombo*) and *qulo/quloo,* a small pot for boiling cooking cereals/boiling milk are sold on that very day. These products are transported by wrapping them using leaves of banana or *ensät* tree and coiling them with *yomo* (*yomoo*)*,* a dried wilted *omo.* Manno and Mänjo potters sell their products in separate places of the market. My study in the field suggests that the Mänjo sell their pottery products at a rather lower price. There are also evident variations in terms of the place that Manno and Mänjo potters occupy in the market. Whereas the Mänjo sell their products in the southwestern corner of the market, Manno potters, large in number compared to their Mänjo counterparts, sell their pots in the northwestern part of the market. Non-potters from other clans prefer Manno pots to those of the Mänjo. Interviews suggest that quality and strength are important characteristics for selection of pots in the market. Of all the three groups of potters in the study area, the Mänjo sell their pottery

products at a rather lower price. This is attributable to a cultural reason other than the crude nature of their products. As opposed to the Manno and Mäniyo, pottery made by the Mänjo cannot be used in rituals, which implies the relative recency of women's involvement in pottery production (see also Gezahegn 2001:90). In general, the Mänjo lack other artisanship as a hallmark of their community except that their men are still considered as skillful tree climbers and hunters. Note should however be made that I have come across a Mänjo forger selling a variety of iron tools at Mära (see figure 11.47). Forging metals is a rarity among the Mänjo and, in all instances, cannot be seen as an important artisanship of the male.

The gender distinction between makers and sellers of pots among the Mäniyo is extremely interesting and quite unusual. Mäniyo women engage in pottery while some of their men practice smithing (*qemo*). In any case, husbands of Mäniyo potters, apart from their substantial support in the production and commercialization of pots, work on their own plot of land or for other farmers and share the harvest.

Figure 11.42. Mänjo potters at Sänbäte market, Mankira.

Figure 11.43. Manno potters at Sänbäte market, Mankira.

At Mära market, potters from the three clans sit disjointedly in patches. They sell such pottery products as coffee roasting-griddle(*bune-midado*), coffee pots(*bune-qondo*), small pots for boiling water(*qulo*), large water jars(*ači-qondo*), pan for cooking stew (*dišto*) and beer brewing jar (*gano*/*gaanoo*)- derived from the Amharic *gan*). Most coffee roasting-griddles sold at the Market are produced by Mäniyo potters whereas each of them bring coffee pots and two or more of the pottery products listed above.

Mäniyo potters from the same vicinity come to sell pots on every market days, essentially on Sundays and Wednesdays. The mere fact one comes across Mäniyo men in the way to and in the market, itself, is suggestive of the substantial role they have in the production and commercialization of pots. They travel from Boqa to this weekly market covering 12 km. Men have to take the same responsibility on the Sunday market for it is a rest-day for potters. According to some of my informants, men regularly travel to the market with pottery products including coffee pots and a coffee roasting-griddle and sell them in the market while their wives stay in the village producing pots.

Figure 11.44. A Mäniyo man selling coffee roasting-griddle (*bune-midado*) at Mära market, Adiyo.

Figure 11.45. Manno potters selling coffee roasting-griddle (*bune-midado*) at Mära market, Adiyo.

Figure 11.46. Mänjo potters selling clay stove and *qulo* (steaming pot) at Mära market, Adiyo.

Figure 11.47. Products of a Mänjo forger (knife, spearhead and bayonet) for sale at Mära market, Adiyo.

Potters clan	Price given(in Eth.birr)	
	Coffee pot(*bune-qondo*)	Coffee roasting-griddle(*bune- midado)*
Mänjo	2-3 birr	5-10 birr
Manno	6-12 birr	15-20 birr
Mäniyo	5-10	6-15

Table 11.4. Summary of variation in the price of coffee pots (*bune-qondo*) and coffee roasting-griddle (*bune-midado*) at Sänbäte market, Mankira and Mära market, Adiyo-Kafa.

11.2.2. Pottery among the Majangir

Majang potters (*Išokeñinong/Ishokeenynoong*) produce a range of pots for storage, cooking and consumption. Pots utilized in culinary activities include *lewe* (*lewee*), a bowl-shaped pot used in preparing porridge, *mäte* (*matee*), a pot used to boil tubers and root plants and *disti*(*distii*), used to prepare stew. The second type of pot is used to store liquid and prepare drinks. While *kebet-gorowonk (kebeet-goroowonk*), also known as *kebet-mawonk* (*kebet-maawaonk*), is used to store water. *Gani* (*gaanii*), Oromized version of the Amharic *gan,* refers to bigger jars used to prepare two traditional drinks known by the people as *tajan* (honey-wine) and *ogol* (beer). A third class of pottery products used in consuming drinks includes *ancha-logumu* (*anchaa-logumuu*), cups used to drink *tajan* and water, and *kari*-cups (*mätägoy*). The presentation of data on Majang pottery, here, is limited to five types of pottery directly related with the preparation and consumption of *kari* and coffee: *kebet-karionk, kebet-siďanonk, mätäge,* coffee pot (*jäbänoy*) and coffee roasting-griddle (*ďäyen-mu'eko/dhayan mueeko*). The principal concern at this point is on aspects of the technology beginning from acquisition of clay to post firing treatment of pots.

Clay Acquisition and Paste Preparation

The procurement and preparation activities of potters vary irregularly along a continuum from very simple to highly complex according to the time and effort devoted to cleaning the clay and modifying its properties (Rice 2005). In this context, clay acquisition among Majang potters requires travelling for hours from

residential areas to quarries and return to the production site. Potters often use baskets known as *kante* or sacks to transport clay. Fresh clay quarried for pottery is wet, red and sticky in character. Moistened clay, covered by a piece of plastic or leaves of banana, is stored in *gonee*- a wooden barrel kept under the shade of a thatched roof. This method of storing clay helps the preparation of paste with relative ease. The production of pottery among the Majangir takes place in the morning (8:00am-11:00am) and in the afternoon (2:00-5:00pm) when the sun is not too hot.

Majang potters generally spend little effort in cleaning and modifying the clay before the manufacturing of *kari* pots. Unlike Kafecho and Oromo potters, they do not use any additive material (temper) in the preparation of moldable paste. *Uď*e (*udhee*),[171] a wooden log made from a type of tree known locally as *gojbaro* (*gojbaaro*), is used in pounding (*tägeg*) and smoothing the pile of clay in the *gonee*. To make the preparation of paste easier, potters often moisten the *uď*e in a *lokoy* (*lokooy*), bowl-shaped clay vessel, which could also be the base of a broken pot, used to hold water. Then, the paste is placed on leaves of banana tree or a sack.

There is a striking variation in the choice of activity area for pottery production among Majang potters. Accordingly, the most frequented places are nearby thatched huts, open spaces, mainly in front of a house and in backyards where firing pits are dug.

The Production of ***Kebet-Karionk***

Once paste is prepared, potters shape a clay lump into a truncated cone-shaped slab. At this point, potters are ready to begin molding a pot. The Majangir use the term *kurputän* (*kurphuutan*) to refer to the beginning of molding a pot. Molding the *kebet-karionk* begins by forming a ball-shaped paste and placing it on a leveled ground. The interior of the bowl-shaped part is formed by hitting with the fist. The rims are carefully shaped by using four fingers in the inside part of the pot while the thumb works on the outside part of the rim. In setting out for molding, potters place the basal part of a broken pot (*lokoy*) over a small circular hole to serve as a turning device. *Pelte* (*peltee*), a piece of broken calabash, is used in removing the thicker part of the interior surface of the *kebet-karionk.* Potters use the term *kirän* (*kiiran*) to refer to the

[171] *Uď*e is a term referring to a log used to pound clay/coffee/cereals.

process of removing wet clay from the interior part of a pot using *pelte.* The paste removed from the interior part using *pelte* is known as *kirtanak* (*kiirtaanaak*).

Scrapping the exterior part is done with the purpose of thinning the paste. Each time potters remove the thicker part, they moisturize the *pelte* using water in the *lokoy*. Potters smooth the exterior part and inspect the shape of the *kebet-karionk* by rotating the *lokoy* on which the pot is molded. The process continues until shaping the pot is completed.

Figure 11.48. Molding a coil (left) and attaching the coil (right).

Potters start smoothing (*malee/maalee*) the exterior using *ket-tekeñonk* (*ket-tekeeñoonk*) -a lance-shaped wooden tool prepared from a coffee tree. Inspecting the hemispherical or bowl nature of the pot is done with a great deal of concern. In doing so, potters rotate the *lokoy* to the left using their left hand as their right hand continues to work with the *ket-tekeñonk*. After smoothing the exterior, potters enlarge the size of the pot by adding a coiled paste. Two or three coils of paste together (*berintoy/beriintooy*)[172]produce the mouth of *kari* pots. After making two *berintoy*s, potters begin to assimilate them with the first shaped bowl

[172] It is formed by coiling paste and molding up on an already formed spherical body (*a'ek*) of a pot.

using *ket-tekeñonk.* Smoothing the interior part of the *kebet-karionk* is done using the exterior part of *pelte*. Every time potters do the smoothing with the *pelte* to avoid ridges and bulges, they introduce the *pelte* in water.

Figure 11.49. *Ket-tekeñonk* -a wooden tool used in pottery production.

Potters smooth the *berintoy* using *ket-tekeñonk* in a similar way for the exterior part of the body. While forming a third *berintoy,* one hand holds the coiled paste on the wet pot while the other flattens the coil dictated by the shape of the edge, which will eventually become the mouth (*atto/ attoo*) of the pot. The next step is molding the handle (*we'ena/we'enaa*) by coiling the paste between hands. Potters use the *ket-tekeñonk* to form a hole at the lower part of the body to insert a shaft-like mold that would make the handle.

Figure 11.50. Smoothing the exterior of the pot with *ket-tekeñonk.*

Figure 11.51. Smoothing the interior of the pot with *pelte.*

Brushing (*posan*/*posaan*) is the next step in

the production of *kebet-karionk* and of *kebet-sid'anonk.* A piece of leaf from banana tree or the interior part of the branch of same tree is employed for this process. It is performed around the interior and exterior part of the mouth and on parts where decorative motifs are produced. Once the *kebet-karionk* is formed, potters start the process of decorating (*gaseyät/gaaseeyat)*[173] First, a string roulette(*gase/ gaasee*) is prepared from the bark of *wanza* (*Cordia africana*), locally known as *dämpe* (*dampee*)*,* by placing pieces over the lap and rolling them to form a thread of fine thickness and tether it at the terminal ends. Potters often cut the longer part using fire or a machete. Then, they place the piece of rope vertically on the pot and roll right below the *berintoy,* layers of coiled paste producing the mouth. While twisting the ropes around the pot, they moisturize the exterior to make it easier to decorate. The entire process of production from *kurputän* to the decorating (*gaseyät*) stage requires up to two hours.

Polishing *kebet-karionk* and shaping the base (*tiri/tirii*) right after molding is considered as a cause for destruction of the entire pot. Therefore, like Kafecho and Oromo potters in Jimma, Majang potters do not begin working on the base of a pot right after the completion of molding. My observation in the field reveals that four hours suffice to lower the moisture content of the pot. Potters usually start working on the base (*tiri*) of a pot in the late afternoon. The next stage is polishing the pot, *gigäron* (*giigaroon*), a process of rubbing the exterior surface of a pot with a basaltic pebble known as *kugujoy* (*kugujooy*). This pebble, also called *kugujo* (*kugujoo*), is used to polish all except the decorated part of the pot. *Gigäron* is done on the *lokoy*, which potters rotate as the process progresses resulting in a smoother and shiny surface. Majang potters use the term *kurguñan* (*kurguñaan*) to refer to the process of shaping the base of the *kebet-karionk*. This starts by picking the pot from the *lokoy* and removing the bark of banana that had been put on the turning device (*lokoy*) during the *gigäron* stage*.* Then, potters put the wet pot on their lap and start scrapping the thicker part of the paste from the base. They use *ket-tekeñonk* to smooth the base and remove the thicker part. In the process, they put the pot on their lap and moisten the *ket-tekeñonk* to smooth the base and remove thicker parts with relative ease. At the end of the *kurguñan*, the removed part of the paste (*kurguñtanak/ kurguñtaanaak*) originally kept on the *lokoy* is accumulated in the *gonee* for future use.

[173]The etymology of the term *gaseyät* is *"gase"* (i.e. rope).Thus, the term denotes the process of decorating by using rope.

The Production of ***Kebet-Siďanonk***

The *chaîne-operatoire* in the production of *kebet-siďanonk* is very much alike with *kebet-karionk*. Therefore, I succinctly outline the stages in the production of this pot used in distilling *kari. Kurputän,* the beginning of molding the pot, begins by shaping a sphere-like paste and then flattening the lower part by punching using the fist, as is the case for *kebet-karionk*. Then, potters put the clay and start shaping the *kebet-siďanonk* by rotating the *lokoy* on which the pot is shaped. The process of smoothing the interior part of the pot, *yäyan,* involves controlling the shape with the hand. The task of smoothing the exterior surface of a pot is carried out using the *ket-tekeñonk* and water. Potters rotate the *lokoy* as they do the smoothing (*malee*) around the pot and control the shape of the body with one hand.

Figure 11.52. Coiling to make berintoy of the *kebet-siďanonk.*

The next stage is *liret*, which involves trimming the edge of the mouth using a piece of wood. Potters add two coils of paste to make *berintoys* and assimilate them with the body built using *ket-tekeñonk*. The exterior surface of a *berintoy* remains visible as an extension of the body. At the brushing (*posan*) stage, potters polish the pot by using a piece of leaf of a banana tree by rotating the *lokoy.*

Decorating (*gaseyät*) of *kebet-siďanonk* is done using a string roulette (*gase/gaasee*) made of the bark of *dämpe* (*Cordia africana*) around the pot right below the *berintoy*. Like *kebet-karionk*, potters often make two layers of decoration. What follows drying pots is *gigäron***-**polishing the exterior surface of the body of the pot by using *kugujoy.* Re-polishing the pot and removing ridges and thicker parts (*kurgugñan*) is done by using the *ket-tekeñonk.* The removed paste (*kurguñtan*) is placed back to the wet clay on the *lokoy* and the *kebet-siďanonk* is exposed to the sun with its base sideways, which also facilitates ventilation and drying. When the base dries, it can be placed in an inverted position so that it will dry by direct sunlight. The prevailing weather is a determinant factor that controls the rate of drying. Obviously, pots easily dry under sunny condition, but under cloudy and rainy conditions, potters keep pots on *palle* to dry them using heat and smoke from the hearth (*koytak*) beneath the *palle*.

The Production of ***Kari*** Cups (***Mätägoy***)

Akin to the Kafecho, who largely make use of bamboo-made coffee cups, the Majangir in southwest Ethiopia still use clay made *kari* cups known as *mätägoy* (singular *mätäge*). Traditionally, it is an emblematic artifact for present day Majang communities who proudly tell of its antiquity and association with the consumption of the drink. This cultural material is one of the most frequently produced pottery to meet household needs of potters and non-potters living in the outskirts of Teppi. The *chaîne opératoire* in the production of *mätäge* involves comparable steps with the two types of pots discussed in the forthcoming sections of the chapter. Since it is the smallest of all pottery in the study area, its production takes lesser time and energy.

The stages of production of *mätäge*, albeit analogous with other pots used in the preparation of *kari,* are expounded here. As in the production of other types of pots, potters first form a ball-shaped paste between the two hands and then start molding the cup. The cup is instantaneously molded with hands and is placed on *lokoy*, which, in this case, could be a broken piece of *mätäge*. What follows is the *yäyan*, smoothing the interior of the cup by hand. Then, potters trim the mouth of the cup with a piece of bark from wood. The next step is the *malee*, smoothing the exterior part of the cup using *ket-tekeñonk*. After the *malee,* potters

mold the handle (*we'ena)* of the *mätäge* by flattening and smoothing a tiny part of the paste using *ket-tekeñonk*. The process results in a small coil that is attached to the upper edge of the mouth and to a hole formed in the lower part of the body above the base. Assimilating the terminal ends of the handle with the exterior and interior surfaces of the pot is doable with *ket-tekeñonk* and hand.

Figure 11.53. A potter molding *mätäge* on *lokoy.*

The next stage in the *chaîne opératoire* of the production process is *posan* -brushing the rim using a piece of leaf by holding the rim and rotating the *mätäge* on the *lokoy*. The process known as *gaseyät* refers to the task of decorating the pot in a similar way described above for the other *kari* pots. The process of decorating (*gaseyät*) is accomplished by rolling string roulette (*gase*) on the part below the rim from one side of the handle to the other end. Potters also embellish most part of the pot by producing zigzag incisions. Then, the *kari*-cups are exposed to the sun for five to ten minutes after which they are placed under a shade of a tree or a house to dry by wind. Potters keep the *mätägoy* in their living room to dry them by aeration. On the next day, they start *gigäron,* polishing the undecorated part of the *mätäge* with the basaltic pebble (*kugujoy*), which results in a shiny surface.

Figure 11.54. Sun drying *kari*-cups (*mätägoy*) on *lokoy.*

In the next stage of production, known as *kurgugñon,* potters work on the base of the *mätägoy.* Potters first use the *kugujoy* to polish the surface of the base of the cup (*tirinek)* and then the *ket-tekeñonk* inside the water of the *lokoy* to moisten the base and make it easier to work with. Both the process of *gigäron* and *kurguñon* are done on the lap. After completing the *kurguñon* for the body, the *mätäge* is spotted on the turning device (*lokoy*) in an inverted position to dry in the sun until a second round *gigäron* takes place after ten minutes or so. In the second round *gigäron*, potters polish the base and the body with *kugujoy* and clean the polished part using a piece of cloth and the *mätäge* is placed in an inverted position on the *lokoy* so that the base dries under the sun.

The Production of Coffee Pots (***Jäbänoy***)

Although I have underscored the secondary nature of the consumption of coffee prepared from beans of the plant, the coffee pot (*jäbänoy*) constitutes an important part of pottery production among Majangir. Due to its morphology, the *chaîne operatoire* in the production of coffee pots follows quite a different course. Molding the pot begins by placing a *lokoy* on the leveled ground to make it stable. Potters often start the *kurputän* stage of production by turning the paste into a ball-shaped lump between the two hands and shaping the paste into an inverted bowl by slapping the exterior and widening the bowl shaped paste while inspecting the shape of the rim. Then, the bowl-shaped paste is placed on the *lokoy*.

Figure 11.55. The *kurputän* stage: Rounding the paste.

Potters smooth the exterior by polishing the surface with one hand while the other hand supports the interior (*täkkänek/ takaneek)* of the body. As potters do the *malee* (i.e smoothing the exterior surface), they rotate the *lokoy* in counterclockwise position but continue shaping the coffee pot using *ket-tekeñonk*. The whole process is aimed at smoothing and inspecting the shape of the pot.

The next stage in the production of a coffee pot is *berintoy* (enlarging the size of the body of a pot by adding a coiled paste). Potters often make a coil by rolling the paste between hands and building up *berintoy* on the spherical body in the making. Then, they smooth the exterior to assimilate the *berintoy* with the body using *ket-tekeñonk* and water. Then, the *berintoy* is shaped into a funnel-like wet clay and start to support the process of smoothing the exterior by inserting three fingers (i.e index finger, middle finger and ring finger) in the tunnel-shaped paste that would ultimately form the neck (*ñoď o/nyodhoo*) of the *jäbänoy*. A second *berintoy* is added in a similar manner to finalize the molding of the neck. At the end of making the *berintoy* in circular forms, potters insert the middle finger of the left hand inside the funnel-shaped neck and smooth the exterior of the pot using *ket-tekeñonk* introduced in water.

Yäyan, smoothing the interior, is the next step in the *chaîne operatoire* of molding the neck (*ñoďo*) of a coffee pot using *ket-tekeñonk* with one hand, while the other hand supports the exterior to avoid deforming the pot. Once the molding of the body and the neck of a coffee pot is finalized, potters start working on the handle of the pot known as *ari*. It is formed by coiling the paste, flattening one end and inserting a rod-like paste in a hole formed close to the body, and attaching the flat part to the neck.

The last part of a coffee pot to be produced is the spout (*kändoy/kandooy).* At this stage, potters measure/estimate the parallel spot to the lower part of the handle. At this stage, *ket-tekeñonk* is required to form a hole. Potters produce a *sayan* (*saayaan*)*,* a ball-like paste formed by hand, flatten it and mold it into a spout with the middle finger. Once the molded paste is attached to the body, the *ket-tekeñonk* is used to create a passageway that would make the spout. A piece of wood is used to cut the terminal end of the spout in a slanting position. Potters smooth the exterior surface around the spout in two ways: first, with *ket-tekeñonk* and then by hand.

Trimming irregular ridges of the mouth (*atto*) and smoothing the interior of the neck involves the use of *ket-tekeñonk* and a piece of wood respectively. Potters habitually rotate their hand on the exterior part of the neck to produce a circular ring that would form the rim. A piece of banana leaf is used for cleaning or polishing (*posan*) the mouth. Since coffee pots comprise one of the most commonly decorated pots of the Majangir, it is a cautiously produced by rolling the string roulette (*gase*) around the neck (*ñod'o*) of a coffee pot starting below the rim to the lower part of the handle. The part below the handle and the spout are mostly decorated with zigzag and horizontal decorative incisions just above and below the meandering incisions on the body of a coffee pot using *ket-tekeñonk.*

The ethnoarchaeological study among Majang potters shows that the entire processes from *kurputän,* the beginning of molding, to *gaseyät,* the decorating phase a coffee pot, takes about three hours. Right after the completion of decorating a coffee pot, potters tend to expose the pot to wind by placing it under a shade for fear that an immediate exposure to extreme heat would easily deform the pot.

Figure 11.56. Incised coffee pot seated on *lokoy*.

Polishing (*gigäron*) of the exterior part of a *jäbänoy,* is done with a *kugujoy* after the pot dries. In the process, the undecorated parts of the neck (*ñoďo)*, the handle (*ari/arii*) and the mouth (*atto*) are polished by placing the coffee pot on *lokoy*. Polishing and shaping the base (*tirii*) by using *ket-tekegñonk* and water is done by placing the coffee pot on the foot, holding the body (*a'ek*) with one hand, and shaping and smoothing the base using *ket-tekeñonk*. Although shaping the base (*kurguñan)* often takes place by placing the coffee pot on foot, shaping the base of a bigger *jäbänoy* is done on the lap. Polishing the exterior surface of the base (*tiri*) involves using a basaltic pebble (*kugujoy*). After completing the second *gigäron* on the body (*a'ek/a'eek*), the *jäbänoy* is spotted on the potter's feet to polish the neck (*ñoďo*) below the decorated part and the handle. Then, the polished part is cleaned with a piece of smooth cloth. Note should be made, here, that two types of basaltic pebbles (*kugujoy*) are employed in polishing a *jäbänoy*: a small *kugujoy* for the mouth and a bigger one for the body and the base of the pot. Polishing and removing ridges

and thicker parts *(kurguñon)* of the base calls for the use of *ket-tekeñonk*. After this stage, the *jäbänoy* is left in a reversed position with its base facing the sun.

The Production of the Coffee Roasting-Griddle (***D'äyen-Mu'eko****)*

The Majangir make use of two types of griddles in culinary activities*: ď'äyen-mu'eko,* griddle for roasting coffee and *ď'äyen-kiyonk* (*dhayen-kiyoonk*)*,* griddle for baking bread. Potters generally produce griddle (*berde/berdee)* of different sizes used as a turning device (*lokoy*) on which new griddles are replicated. In chapter ten, I have clearly indicated that the consumption of coffee prepared from beans remains secondary in the coffee consumption habit of the Majangir. Even then, for the roasting of coffee and other utilitarian purposes at household level, they principally use *ď'äyen-mu'eko*. The *chaîne opératoire* for this pottery, depicted in the subsequent paragraphs, is different from the other coffee-related pots presented in the preceding sections of this chapter.

The *kurputän* stage begins by turning a handful of paste forming a ball-shaped lump between hands. Potters commonly shape *ď'äyen-mu'eko* on an old griddle (*berde*), a wooden tray (*gäbätoy*) or a metal tray used as *lokoy.* At this stage, potters flatten the ball-shaped paste by slapping (*pañan/paanyaan*) and place it on the *gäbätoy* or the tray covered with ash or bark. As in the production of other *kari* pots, the molding of griddle requires rotating the tray. Potters use one hand to rotate the tray while they simultaneously form the edge (*käntänek/kantaneek*) with the other hand. The process of shaping the edge of a griddle is known as *liret* (*liiree*t)*.* It involves the use of the edge of *pelte* to remove thicker parts and to smooth the upper surface (*täkänek/takaneek)* using the exterior surface of the *pelte*. At this stage of the *liret*, some potters remove undulating ridges by pinching and leveling the edge (*käntänek*), a process followed by removing the paste from the irregular edge using a piece of wood. Potters check the thickness of the griddle by pressing the upper surface and turning it uniform by trimming the edge and filling the hole.

Polishing or cleaning the edge of a griddle is done in two different ways. Some potters rotate the griddle and brush its edge with the exterior surface of the bark of bamboo, maize or sorghum stalk whereas others prefer to rotate their wet hand over the edge of the griddle in order to make it smoother. After completing this, potters do the smoothing (*yäyan*) of the upper surface using the piece of calabash known as *pelte*. At this level of production, however, potters do not work on the base of the griddle called *yämänek* (*yamaneek*). My ethnographic observation on the production of the coffee roasting-griddle indicates that

thirty minutes suffice for the entire process described above. Once production is finalized, the new griddle dries under the sun for about fifty minutes. Unlike coffee pots, there is no *kurguñan* and *gigäron* for the griddle.

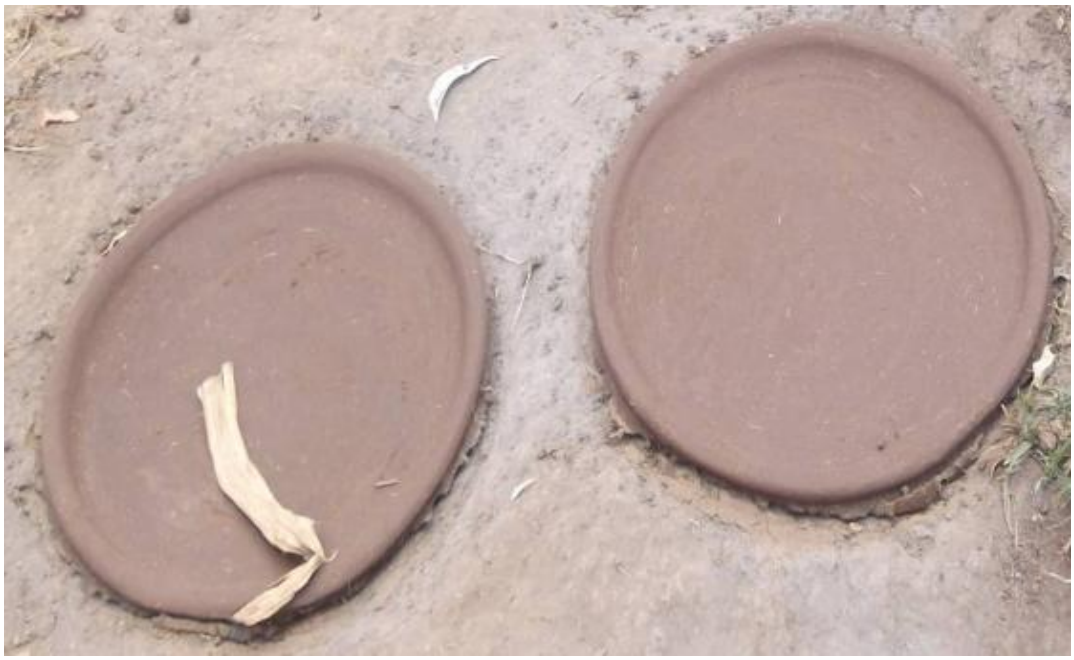


Figure 11.57. Sun drying coffee roasting-griddle.

Firing Pots and Post Firing Treatment

Pots are dried close to houses in the direction of the sun, as slow drying under the shade furnishes the advantage of avoiding cracking. Even then, if pots are drying under the sun, potters periodically check the conditions of drying, inspect cracking, and smooth any cracked parts using *pelte*. All *kari* pots can be tentatively kept on the *palle* so that they get drier by the heat and smoke from the hearth. Drying pots is significantly controlled by the prevailing weather conditions during the time of production. Under dry sunny environments, pots can dry well in two to three days after which they are fired in pits (*ñunmuďeďung/nyumudheedhuung*) dug for this purpose.

Table 11.58. Drying pots on *palle* with smoke from hearth (*koytak*).

There is a pre-firing inspection of coffee roasting-griddle since cracks could be formed up on drying. In this case, potters may fill up the cracks by using paste and /smooth that part using *pelte* and water. Each time such cracks occur, similar remedial actions are taken. Some Majang potters produce a small number of pots in which case pots are fired in a hearth nearby residential areas. If the number of pots is larger, potters often fire them in circular pits dug in compounds or 50-100 meters away from their houses, mostly under a tree where there are no consumable plants including coffee trees. Firing pits are circular in shape but vary in size. The largest and the smallest pits found during this ethnoarchaeological study were 1.10 m in diameter x 0.25 m deep and 0.75 m in diameter x 0.15 m deep correspondingly. The firing pit is prepared by cleaning the ground -using a machete (*gäjäro*) and digging with either the digging hoe or the machete. Some potters dig firing pits nearby a tree for it would provide shelter from the sun. In some cases, potters prefer shady times of the day for it is believed that firing pots under sunny conditions would darken them.

Majang potters favor early morning and late afternoon as suitable times for firing (*mud'e/mudhee*) of pots and particularly of coffee roasting-griddle (*d'äyen-mu'eko*). In firing, potters use dry wood, bark of eucalyptus and avocado trees. In setting out for firing, potters first lay dry wood in the firing pit, essentially

of *wanza* (*dampe*) trees. Thinner woods are set over the fire on which the pots (*mätäge*, *ď äyen-mu'eko. Kebet-siď anonk* and *kebet-karionk*) are laid.

Figure 11.59.Setting the stage to fire coffee-related pottery.

Next, thinner and bigger firewood are placed over the pots and fire is set in the pit. Dry firewood and dry-grass, known as *elti* (*eltii*), are laid on the top to accelerate the rate of combustion. Then, potters cover the pit with leaves of banana or other weeds. This process of covering the pit with leaves to control firing is locally known as *dire*. Puffing the fire and inserting a stick into the burning wood accelerates the combustion reaction in the open firing method. Sometimes potters could fire pots (for example, a coffee roasting-griddle) in a hearth set in the compound, in which case the griddle is placed on fire covered by a bundle of dry grass. Leaves are spread on the top of the burning fire over the griddle and the fire starts to smoke. Under these conditions, potters open holes by inserting a stick into the hearth so that the fire burns well and the griddle can be taken from the hearth after thirty minutes. Potters use two sticks to pick the griddle from the firing pit and put it on the ground. After the firing, potters pick up the *kari* cups (*mätägoy*) and coffee pots (*jäbänoy*), using a wooden stick and place the pots on the cleared leveled ground. Potters use sticks, leaves or a piece of cloth to take out coffee roasting-griddles (*ď äyen-mu'eko*) from a firing pit.

Figure 11.60.Taking coffee-related pottery out of a firing pit.

Unlike, Kafecho and Oromo potters, the Majangir regularly treat pots in a relatively simple manner. Potters first let the pot cool on the ground. The process of cooling the pots is known by potters as *saluwuron* (*saaluwroon*). Then, the pots are treated in a range of different ways. *Tänget* (*tangeet*), removing the ash covering pots, is done by hitting the exterior parts of the pot with leaves. What follows is the *mumujon* (*mumujoon*), polishing the upper surface (*täkäneek*) of the griddle by using leaves from the surroundings, mainly leaves from the pumpkin plant. *Mumujon* is a technique also applied on other coffee related pots (for example, *mätägoy, kebet-karionk* and *kebet-sid'anonk*) by rubbing the mouth, the body and the base of the pot with leaves from the surrounding mostly of *bisana* (*Croton macrostachys*) and bitter leaf or *grawa* (*Veronia amygdalina*) trees.[174] Availability and access to trees is a key factor in using them during post-firing treatment of pots. In some instances, however, daubing coffee roasting-griddles using leaves of *wanza* (*dämpe*) tree or leaves from other plants is considered as sufficient to prepare the griddles for roasting coffee. Potters also clean the ash from the body of *jäbänoy* and *mätäge* with leaves from the surrounding. This process of cleaning ash covering the body of *jäbänoy* and *mätäge* is known by potters as

[174] For the scientific names of these trees, refer Fichtl and Admasu (1994:235; 272).

käti (*katii*). Not all pots produced are used at home. Some coffee and *kari* related pots could be sold within the potters' village while most are sold in the Teppi market. For the sake of transporting pots from the firing pit to a household and then to a market, Majang potters make *känken* (*kankeen*)), a net made from wilted bark of *ensät.* The number of pots carried to the market varies across potters. On average, a potter could carry wrapped 5-6 coffee roasting-griddles on her back while holding small pots such as *jäbänoy* and *kari* pots (*kebet-karionk* and *kebet sid'anonk*) and *mätäge* in a *kante*.

In the district of Godäre, Majang potters from Gelesha, Goshini,Cemi and Dunóay localities sell their pottery products in the weekly market of Meti town. Potters also sell their pottery products to neighbors and dwellers of the nearby villages from home. While potters near Teppi has to travel for about 25 to 30 minutes from their village at Goji in Addis-Berhan to the market of Teppi, potters in the adjoining areas of Meti travel for a rather long hours ranging between 30 minutes to 3 hours. Compared to the high quality of pots produced by Majangir potters, the price given to them is lower than those produced by Kafecho and Oromo potters. The following table presents a synoptic summary of the distance between production areas and the market center, and price of coffee-related pots produced by Majang potters.

Pottery production sites	Time required to reach the market
Goji(near Teppi)	25-30
Godäre(Gambela)	
Gelesha	2:00 hrs
Goshini	1:30 hrs
Cemi	30 minutes
Dunóay	2:30-3:00 hrs

Table 11.5 Time required to travel from pottery producing Majang villages near Teppi.

Pottery types	Price(Eth.*birr*)
Coffee pot(*jäbänoy*)	20-25
Mätägoy	5-7
Kebet-karionk	10-15
Kebet-siďanonk	10-12
Coffee roasting-griddle(*ďayen mu'eko)*	25

Table 11.6 Average price of Majang coffee-related pottery products at Teppi market.

Figure.11.61. Majang potters selling coffee pot (*jäbänoy*), *kari*-pots (*kebet-karionk* and *kebet siďanonk)* and *kari*-cups (*mätäge*), Meti market, Gambela Regional State.

Some remarks can, then, be made of pottery among the Majangir in the study area. *Pelte* is used at the *yäyan* stage, smoothing the interior of and *kebet-siďanonk* at production stage. *Yäyan* in the *mätägoy* production is done with or without the use of *pelte*. Likewise, *ket-tekeñonk* is not required while molding coffee roasting griddle. A string roulette (*gase*) can be used repeatedly for decorating pots (i.e. a potter who uses a *gase* to decorate a *kebet-karionk* can use it for another *kebet-karionk*, *kebet-siďanonk* or *mätägoy* made of the same paste).

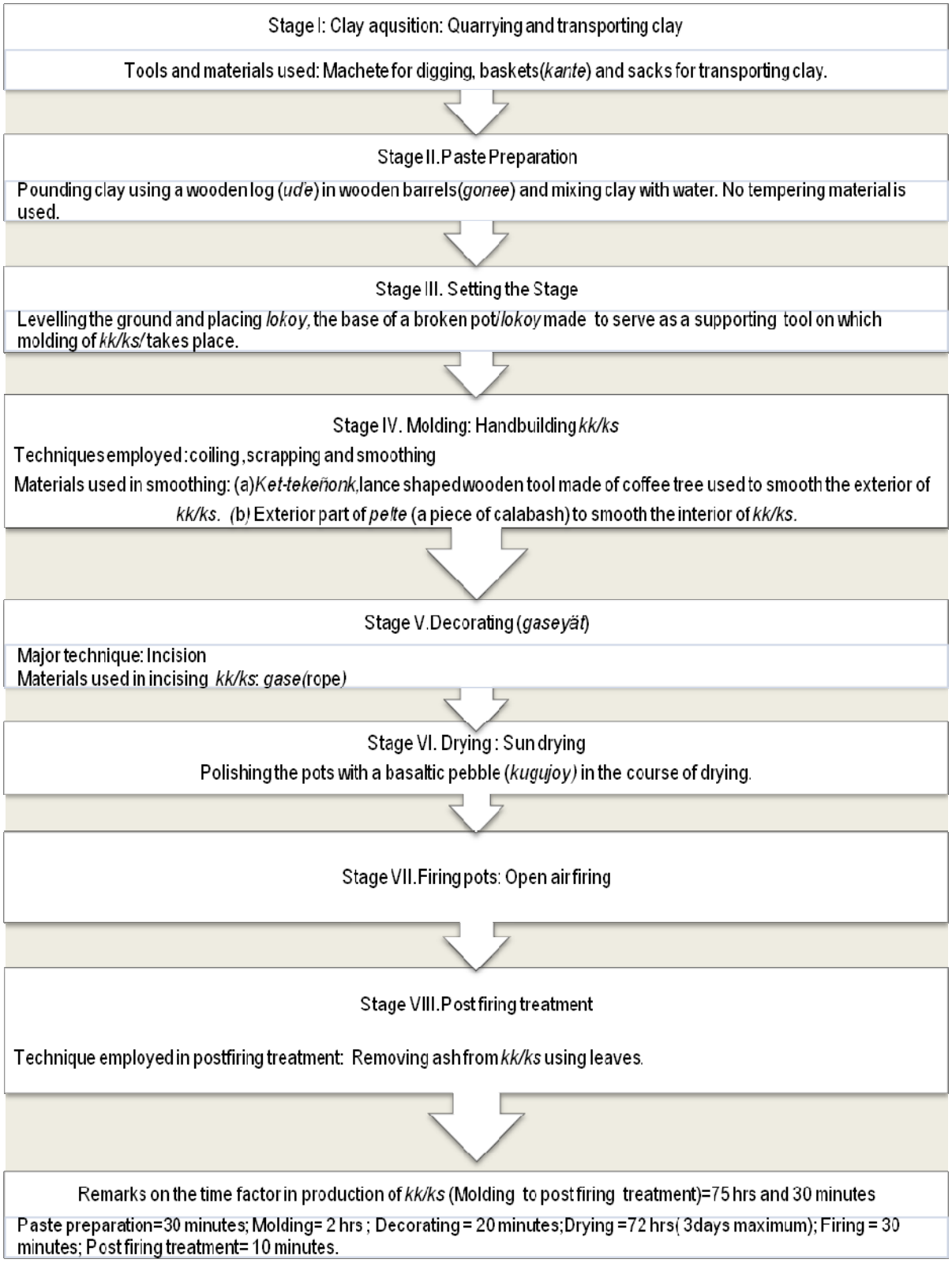


Figure 11.62. The *chaîne opératoire* in the production of *kebet-karionk* (*kk*) and *kebet-sid'anonk (ks)* among Majang potters.

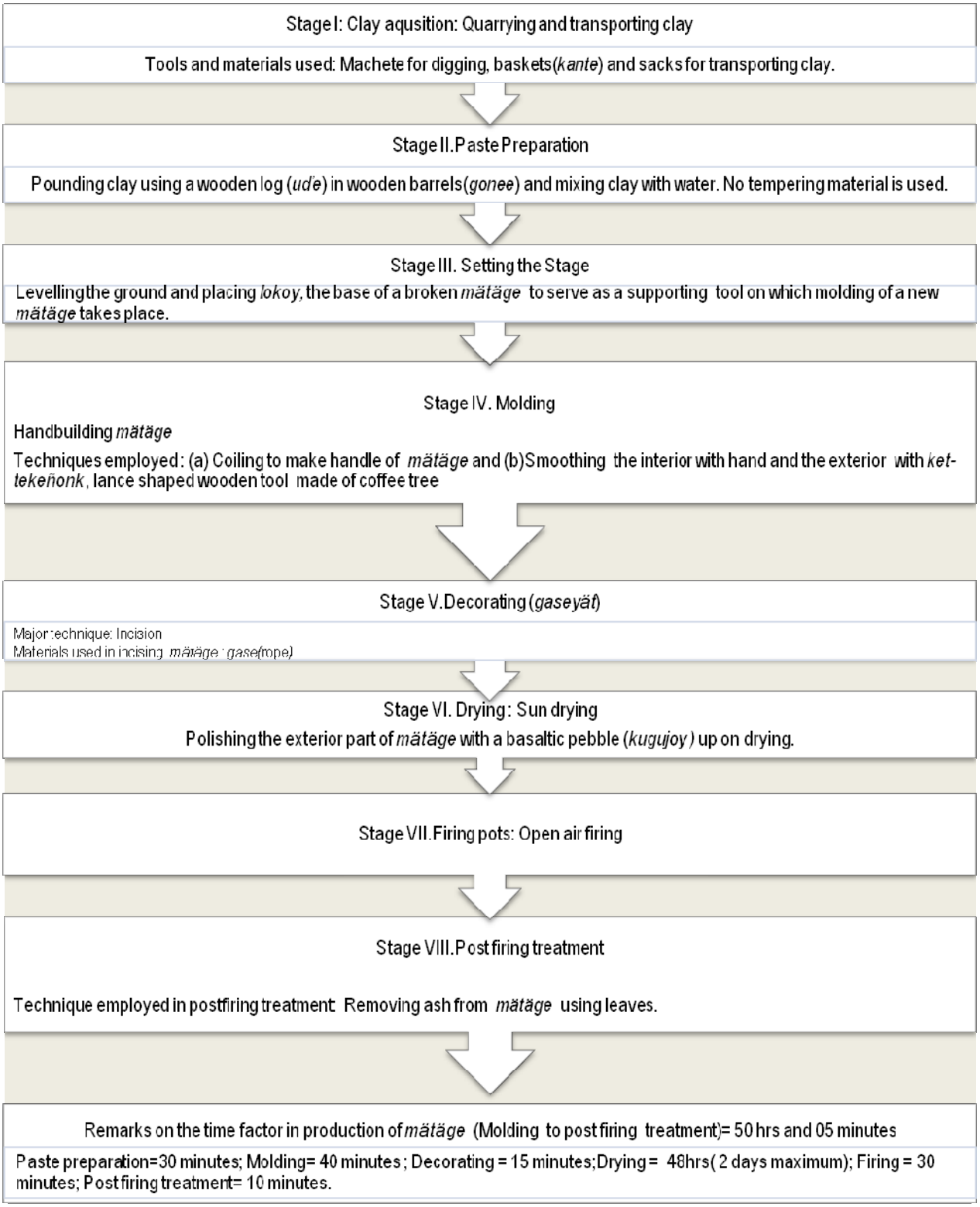


Figure 11.63. The *chaîne opératoire* in the production of *kari*-cup *(mätäge)* among Majang potters.

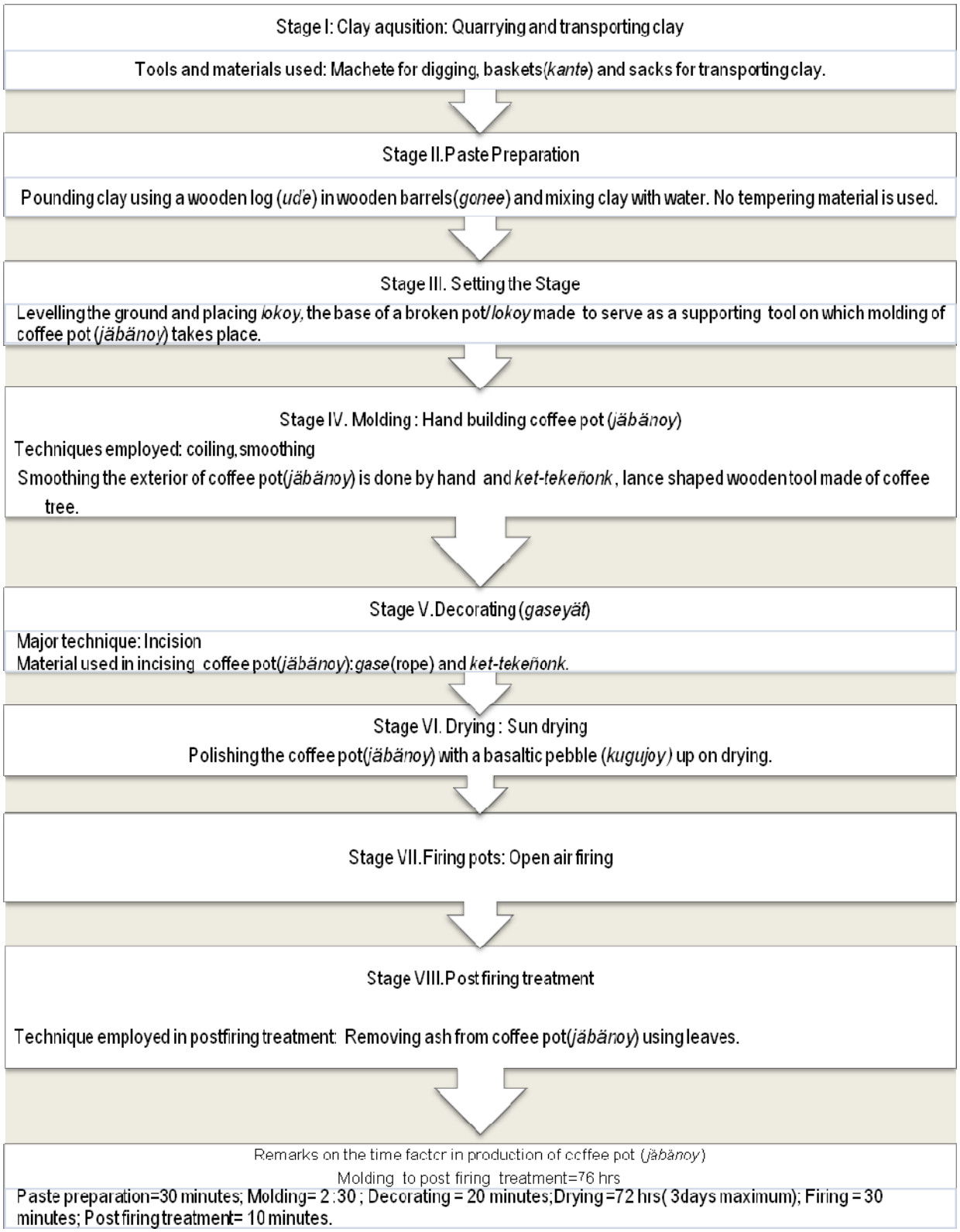


Figure 11.64. The *chaîne opératoire* in the production of coffee pot *(jäbänoy)* among Majang potters.

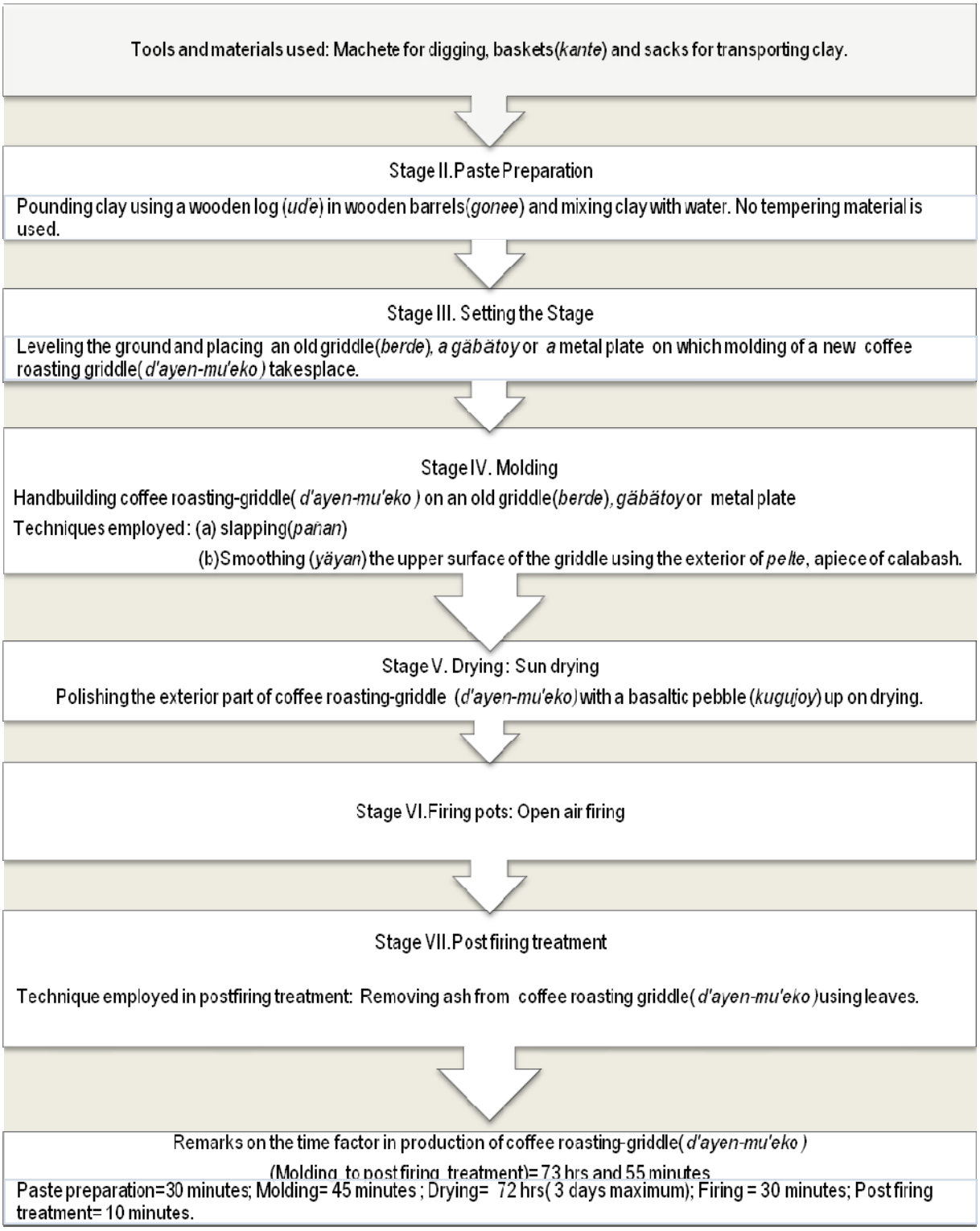


Figure 11.65. The *chaîne opératoire* in the production of coffee roasting-griddle *(d'äyen-mu'eko)* among Majang potters.

11.2.3. Pottery among the Jimma Oromo

Pottery production in Jimma was studied among the Oromo living at Gänji-Dalächo, a rural *qäbäle* eight kilometers northwest of the town of Agaro and among the Oromized Yäma (formerly called Janjero) living in the village of Molle and Märäwa localities situated at about two kilometers south of Jiren and five kilometers to the west of Jiren respectively. The main purpose was to document stages in the production of coffee related pots and to assess the social position of potters.

Potters' preference of time for the manufacturing process varies although morning (10:00am), afternoon (2:00-3:00pm) and late afternoon (4:00-5:00pm) are the most favored times. There is also variability in potters' skill of producing pots. In view of that, there exists an evident specialization of pottery production among Oromo potters in Gänji-Dalächo and Oromized Yäma potters at Molle. Both produce pottery products other than the coffee pitcher locally called *jäbäna-buna* or *jäbäna-qahwa*, which, however, are produced by potters living at Märäwa. Potters in these localities produce (a) *ele-bicu* (also called *ele-buna/elee-bunaa)*, a small griddle used in roasting coffee, baking bread and toasting cereals, (b) *girgirta*, incense burner*,* (c) *waciti,* a bowl-shaped pot used in the preparation and consumption of *bunä-qäla,* and (d) *jäbäna-buna* (*jäbäna-qahwa*)*,* a coffee pot. The production of the first three pottery products (a, b and c) is a skill belonging to few potters living at Gänji-Dalächo, while *ele-bicu* can be considered as the only coffee related pottery produced by Oromized potters of Yäma at Molle. Potters in the study area also produce such non-coffee related pots as *ele-bidena*(*elee-biideenaa*)*,* griddle used to cook a sourdough risen flat bread prepared from *tef* or other cereals chiefly sorghum and barley, and *huro* (*huroo*)*,* a pot used in brewing a local beer called *färso* (*farsoo*)*.* In the past, it was highly in demand by people hosting the *Gadaa* ceremony during which a feast was a prerequisite. Even if *huro* is still under production*,* it is used in fermenting the local beer, *färso*, at household levels.

Huro-bicu (*huroo-bicuu*), also known as *tibe* (*xibee*) is a smaller *huro* usually placed to the right and left of the main *huro* during the preparation of the local beer. The three *huro*s are considered by the Jimma Oromo as allegorically representing a mother and children. Potters also make *jalo* (*jaaloo),* bigger pots used to brew *färso*. Other pottery products include *disti* (*distii*)[175] a cooking pan used to prepare stew and *okotte* (*okottee*), a small pot used to boil corn/cabbage and prepare porridge.

[175] The term "*disti"* has its orign from the Amharic *dist.*

Like their Kafecho and Majang counterparts, Oromo potters at Gänji-Dalächo and Oromized-Yäma potters living at Molle make use of a set of materials employed in production. Potters acquire clay from their village not far off their residence. In the preparation of paste, Oromo potters use *d'äga-supe* (*dhagaa-suphee*), a flat stone on which clay is pounded using a pestle (*bokku)* prepared from coffee tree and *ŧäbo*(*xabboo*), a bowl-shaped plastic or clay vessel to hold water during the molding stage. In the final stages of pottery production, potters use either a basaltic pebble, *ergäno* (*erganoo*), or a small bottle known by potters as *rigdu* (*rigduu*) to burnish the upper surface of coffee roasting-griddles. *Ergäno* is also used in burnishing coffee pots among the Oromized Yäma potters at Molle and Märäwa. This process of polishing, known as *ergänau* (*erganauu*) or *rigu* (*riguu*), is preceded by leveling the upper surface of the griddle. After the pots dry well, the upper surface is polished again using *ergäno* (*erganoo*) and this process of polishing is known as *ergänamu* (*erganaamuu*).

Unlike Kafecho and Majang potters, some Oromo potters employ the machete (*gäjära*) in the process of thinning (*dägugu*/*daguguu*) the base (*udu*/*uduu*) of coffee roasting griddle. The purpose is to facilitate the roasting process. Potters often scrap the lower part of the griddle in the final stage right before firing. While they start thinning the base of the coffee roasting-griddle, they use water to soften the base so that scrapping with machete becomes easier. In addition, Oromo potters at Gänji-Dalächo use griddles called *ele-batu* (*elee-baatuu*), carrier of the griddle, which serves as a supporting base to cast coffee roasting-griddle (*ele-bicu)* and griddle to bake *injära* (*ele-bidena*/*elee-bideenaa*).

Clay Acquisition and Paste Preparation

Oromo potters at Gänji-Dalächo acquire clay from Sombo, a site accessible in 15 to 20 minutes round trip west of the potters' village. Unlike men among the three clans of the Kafecho and Oromized Yäma, I could hardly capture the involvement of Oromo men in quarrying clay. They use machete or a fork for digging and industrial sacks to transport red and white clay. The preparation of paste takes place at a manufacturing site called *godo-supe* (*godoo-suphee*). Potters first clean the ground and then mix the clay with *ibiqi* (*ibiqii)* -silty straw of *ŧef).* Eventually, they mix both the red and the white clay in equal proportion. Then, they pound the clay on a flat stone (*d'aga-supe*) to mix it further with the straw. Once the paste is prepared, they start the molding of pots. These stages in the preparation of the paste remain similar for other kinds of pots that potters want to produce.

The remaining components of the *chaîne opératoire* in the production of coffee related pots are presented in the subsequent sections of this chapter.

Figure 11.66. *Godo-supe*-a potter's workshop (top), and *d'aga-supe* and *bokku* (bottom).

The Production of the Coffee Roasting-Griddle (***Ele-Biᶜu***)

Oromo potters use the term *ᶜalqäbu* (*calqabuu*) to refer to the first stage of molding a pot. The application of this term, in the context of pottery production, accords with its lexical definition, which denotes the beginning of an action or an event. Production of coffee roasting-griddle takes place on *ele-batu* on which *ibiqi*, silty-straw of *ᵵef* is spread. Potters first bake and flatten a handful of paste on the *ele-batu.* Concurrently, they inspect the shape of the edge while rotating the *ele-batu*. What follows is *walqitesu* (*walqiixesuu*), leveling the upper surface (*fulä/fula*) of the new griddle with palm and smoothing the circular edge of the griddle. Leveling the griddle and smoothing the upper surface using water from clay bowls (*ᵵabo*) occur simultaneously. Potters also use a basaltic pebble (*ergäno*) to level the upper surface of the griddle.

Figure 11.67. Pounding clay to prepare the paste (left). Baking the paste to produce coffee roasting griddle (*ele-biᶜu)* (right).

Figure 11.68. Molding *ele-bicu* on *ele-batu,* a broken griddle (left) and thinning the surface of the *ele-bicu* by scrapping (right).

Figure 11.69. Leveling the surface of *ele-bicu,* coffee roasting-griddle (left) and molded *ele-bicu* (right).

The time required for drying *ele-bicu* varies depending on the prevailing weather conditions. Normally, drying in the rainy season takes a longer time than in dry season. Under cloudy conditions, drying can take up to a week or more. The process of firing sometimes could take place after two weeks of drying under a production site, *godo-supe*. Under a dry weather, pots including *ele-bicu* could dry well between five to seven days. Once the griddle dries, potters burnish the upper surface with *ergäno*. Polishing the upper surface of the griddle at the pre-firing stage results in a shiny surface.

Figure 11.70. *Ergäno*, a basaltic pebble used to level and polish the griddle.

Figure 11.71. Polishing (*ergänau*) of the upper surface of coffee roasting-griddle (*ele-bicu*).

Figure 11.72. Polished surface of a coffee roasting- griddle (*ele-bicu*) at the pre firing stage.

The Production of Incense Burners (***Girgirta***)

The consumption of coffee among the Oromo of Jimma is accompanied by the burning of incense which involves the use of a traditional incense burner (*girgirta*) made of clay. The *chaîne operatoire* in the production of the incense burner is rather different from the other pottery products presented so far. The beginning of molding the incense burner starts by placing a handful of wet clay on a broken piece of griddle over which potters intersperse ash and start molding the basal part known as *milä-girgita*(*mila-girgirtaa*), which literary means leg of an incense burner. When potters mold this part with one hand, they inspect the shape from the outside by spreading the paste from the circular base to the upper part. Molding the basal and the upper part known as *märta* (*marxaa*), is accompanied by rotating the broken griddle on which the paste is shaped. On the edge of the upper part, potters make holes for incense sticks using a thick stalk of grass that will remain in the holes until it dries.

Figure 11.73. Sun drying incense burner.

The Production of ***Waciti***

One of the peculiar features of coffee consumption among the Oromo of Jimma is the preparation and consumption of *bunä-qäla* with which the use of bowl-shaped earthenware, *waciti,* is associated. In relative terms, the *chaîne operatoires* of producing *waciti* is the shortest of all pots produced by Oromo potters. Production begins by molding the base and spreading the paste from the interior while inspecting the shape with one hand from the outside. Every time potters shape the *waciti,* they moisturize the paste with water. Finally, holes known as *gurä-waciti* (*gura-waciitii*) are produced on three projected nods molded on opposite sides of the edge of the mouth using dry grass that will remain in the holes until the *waciti* dries.

Figure 11.74. Molding a *waciti.*

Figure 11.75. A *waciti* from a household at Coce, Gomma.

The Production of ***Hartu***

Hartu (haartuu) is an earthenware used by the Oromo of Jimma to wash and predominantly to collect toasted coffee beans. It is a clay tray with a handle and is common in rural parts of Jimma zone. Oromo potters at Gänji-Dalächo produce this pottery either for consumption at home or to sell them in the local markets.

The *chaîne operatoire* of the production of *hartu* involves the formation of a bowl-shaped base by spreading the paste from the interior and inspecting the shape with the other hand. The next stage is the task of widening and flattening the *hartu* by inspecting its shape. Once the tray shaped part and the handle are molded, potters produce a hanging hole at the tip of the handle by piercing using a straw, which is left in the hole until the clay is fired.

Figure 11.76. Drying *hartu.*

The prevailing weather is an important factor that controls the time required to dry pots. Smaller coffee related pots (for example, *waciti*, *hartu* and *girgirta*) often dry faster than coffee roasting-griddle (*ele-bicu*). In dry weather, these pottery products can dry in three to four days where as coffee roasting-griddles can

dry in about five to seven days. Nonetheless, under wet and cloudy weather condition, drying pots can take up to two weeks or even more.

Firing Pots and Post-Firing Treatment

There are noticeable commonalities in firing pots among potters of the three ethnic groups (Kafecho, Majangir and Oromo) in southwest Ethiopia. Like their Kafecho and Majang counterparts, Oromo potters at Gänji-Dalächo use circular firing pits (*bollo/bolloo*) dug nearby a manufacturing site, *godo-supe*. The depth and width of a firing pit varies though the largest is 0.12 m deep and 1.5 m in diameter. In dry weather conditions, pots are fired in a similar way elucidated for the Kafecho and the Majangir. However, during my ethnographic observation among the potters near Agaro, the weather was rainy because of which the firing pit was filled with water and potters had to fire the pots inside a hearth set in a residential hut. The stages in firing pots indoors are very much alike with firing pots in pits dug for the same purpose. First, woods are laid inside the hearth overlain by pots covered with dry grass and straw before setting fire. Firing takes about 45 minutes to 1 hr. Oromo potters at Gänji-Dalächo locality use a piece of cloth or straw in burnishing the exterior surface of pots chiefly *ele-bicu* after firing.

Figure 11.77. Indoor firing of pots at a cooking spot, Dalächo locality near Agaro, Gomma.

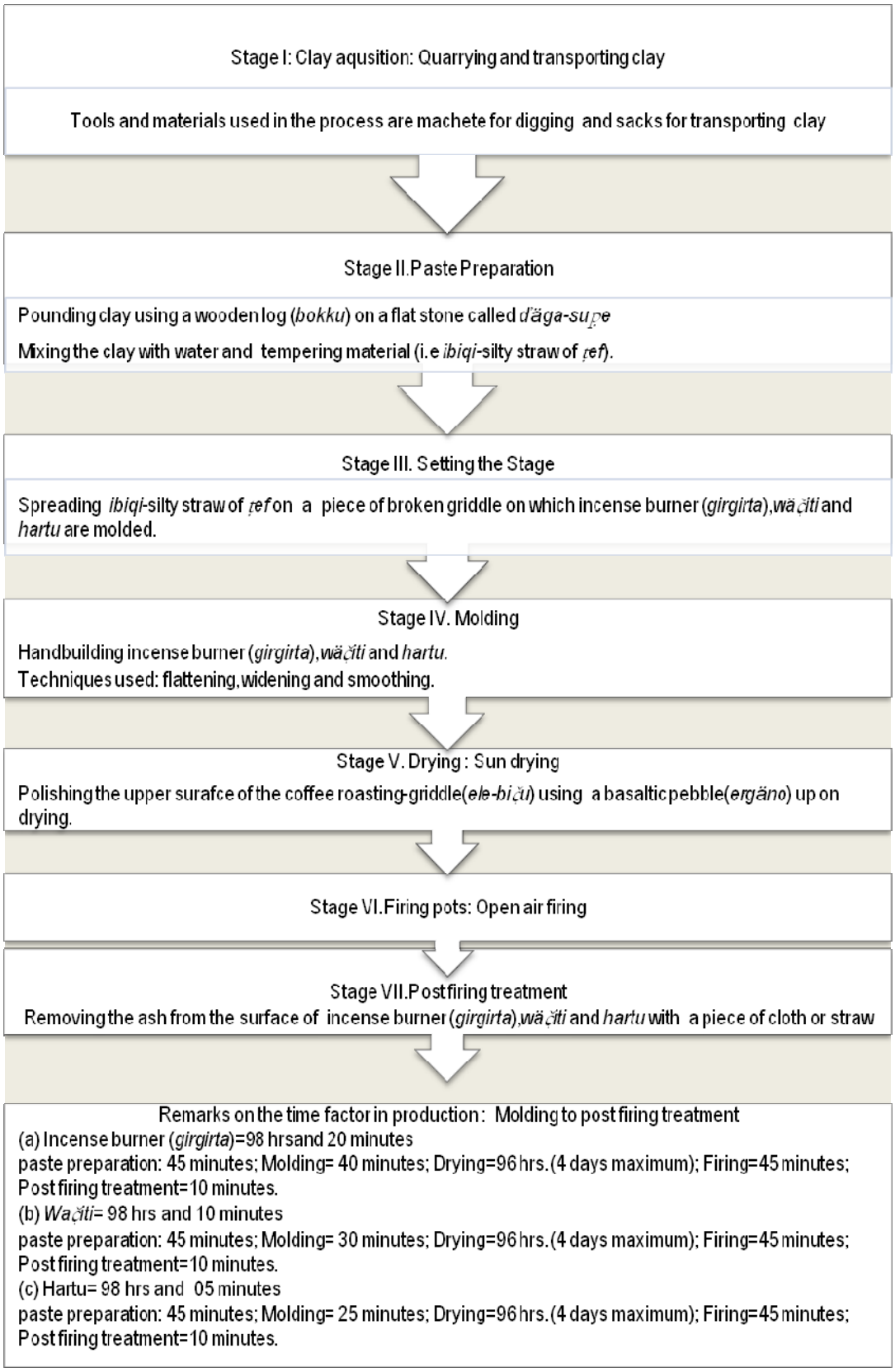


Figure 11.78. The *chaîne opératoire* in the production of incense burner (*girgirta*), *wäciti* and *hartu* among Oromo potters at Gänji-Dalächo, Gomma.

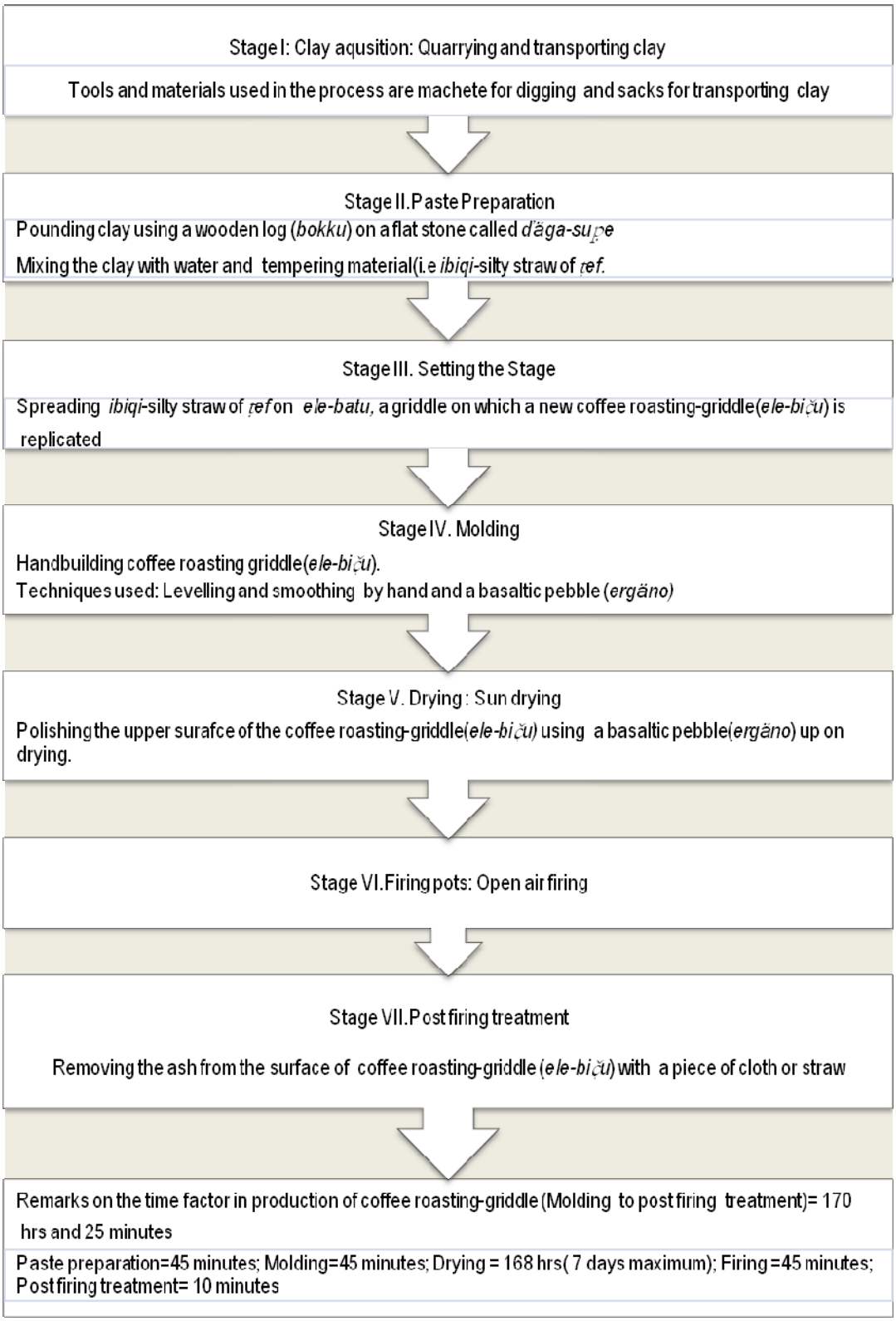


Figure 11.79. The *chaîne opératoire* in the production of coffee roasting griddle *(ele-bicu)* among Oromo potters at Gänji-Dalächo, Gomma.

Pottery Production among Oromized-Yäma in Jimma Zone

Oromized potters of Yäma studied in this ethnoarchaeological investigation live in the environs of Jiren, particularly in the hilly village of Molle about two kilometers south of the palace of Abba Jifar. Since the Yäma have settled among a predominantly Oromo community of Jimma, they have abandoned their language and have become Oromo speakers. An informant from Molle locality recaps the socio-cultural change that has been taking place over a period of a century as follows: "our fathers spoke Janjero [Yäma] although we do not know the language and have become Oromos. We are now Oromo." Like some groups of the Gonga people, the Omotic Yäma of the area have become part of the Oromo through cultural assimilation by the latter due to historical reasons explained in chapter 7, the cultural and historical setting of the people.

Oromized Yäma potters produce water jars known as *ubo-bishani* (*uboo-bishaanii*)*,* griddles for baking bread(*ele-dabo/elee-daaboo),* stoves (*girgirta-käsäla/girgirtaa-kasalaa*)[176] coffee roasting-griddles *(ele-bicu*)*,* griddles for baking *injära* (*ele-bidena*) and coffee pots (*jäbäna-qahwa*). Other pottery products include *huro-aräqe* (*huro-araqee*)*,* pots used in distillation of a traditional liquor and *jalo* (*jaaloo*),[177] pots for brewing a local beer (*färso*/*farsoo*). Men grow corn, *ŧef* and sorghum. Some do not have a coffee farm. Apart from their engagement in agriculture, men assist their wives by quarrying clay, fetching wood mostly eucalyptus and grass required to fire pots and digging firing pits.

Potters learn the art of making pots at an early age from members of their family but chiefly from their mother, grandmother or their neighbors. Most children learn the art a relatively lower age (between 10-14).My interviews with potters at Molle suggest that the knowledge of making pots is passed down from a mother to a child within a family although some potters seem to have acquired the skills through contact with neighbors. In the context of coffee-related pottery, a predominant section of Oromized Yäma potters at Molle locality produce coffee roasting-griddle (*ele-bicu*) and the only skill they could impart to their children is the production of the same type of pottery. Potters at Märäwa produce a range of pottery products than those produced at Gänji Dalächo and Molle. However, the production of some coffee-related pottery, for instance *waciti* and *hartu-buna*, is not common among Oromized Yäma at Molle and Märäwa. Potters at

[176] The term "*käsälä"* is derivative of the Amharic *k*äsäl, which means charcoal. Hence, *girgirtaa- kasalaa* stands for a cooking stove that mainly uses charcoal as a source of energy.

[177] *Huro-aräqe* and *jalo* all are now largely considered as forgotten and it takes between two to three weeks to dry these pots.

Märäwa are noted for the variety of coffee pots that they produce. What present day potters produce is largely a reflection of what they have been trained to do during apprenticeship.

Acquisition of Clay and Paste Preparation

The way clay paste is prepared for the production of pots among Oromized Yäma potters shows a noticeable geographical variation. At Molle, potters often mix black soil and clay, while those at Märäwa use red and black clay. Men assist women in quarrying clay. The holes dug for this purpose do not exceed 1.5 meters in depth. The wet clay from such quarries dries under the sun within a day or two. Then, potters pound the clay using a wooden log (*tuto-supe/ tutoo-suphee)* on a flat stone (*d'aga-supe*). The process of pounding clay by hitting it on the ground helps to crush coarse-sized clay, thus making the preparation of paste relatively easier. Some potters at Märäwa even sieve the pounded clay before the preparation of paste, which involves mixing clay with water, silty straw of *ŧef* locally known either as *mato* (*maxoo*) or *as gäläba-tafi* (*galabaa-xaafii*) or bigger-size straw (*cidi/cidii*). Mixing the tempering materials with the clay is possible by battering the wet clay with one leg until a smooth moldable paste is produced.

Figure 11.80. The preparation of paste by battering with leg.

The Production of Coffee Pot (***Jäbäna-Qahwa***)

The ethnoarchaeological study has shown that Oromized Yäma potters prefer to produce pottery in the morning hours of the dry season. Potters make use of black clay in the production of coffee pots. Materials employed during production are *markäsha* (*maarkashaa*), a bowl shaped vessel used to hold water; *erbe* (*erbee*)*,* a piece of cloth used to moisturize and polish the pot at the molding stage; *känu*(*kanuu*)*,*a piece of wood from bamboo tree, and *gäncho* (*ganchoo*), a broken clay on which pottery production starts. It is crucial to reiterate here that the production of coffee pots in the study area is a specialty of most Oromized-Yäma potters at Märäwa though only a few potters' posses the skill of making pots at Molle.

The c*haîne operatoire* in the production of coffee pots is largely analogous to what have been elucidated so far although there are striking technical variations. The paste is often prepared by mixing the clay with water and silty straw (*mato*)*. S*moothing the paste is done by hand on a flat stone called *d'aga-supe*. The first of the stages in the production process involves molding the body (*gära*/*garaa*) of a coffee pot. The entire process of shaping the body requires inspecting the shape while opening up the paste, and enlarging the body by opening up and pulling the paste. Potters use the term *harkisu* (*haarkiisuu*) to refer the process of pulling the paste. Potters use their right hand to thin the interior by scrapping the paste from the thicker part. They use the term *hapisu* (*haphisuu*) to refer to the process of thinning the pot. In thinning the interior, for example, they concurrently do two tasks: thinning the interior with one hand and inspecting the shape of the molded body with the other hand from the exterior following the movement of the hand working in the interior.

The next stage in the molding of a coffee pot is *mucucesu* (*mucuceesuu),* which involves the use of *känu* to smooth the exterior. This is done using the right hand while the left hand inspects the shape following the movement of the right hand smoothing the interior using *erbe,* which could be a piece of cloth or plastic locally called *sharinaa* (*sharinaa*). Then, the body of the coffee pot dries for six to seven hours, or even for a day before shaping the neck, *mormä* (*morma*).

Figure 11.81. A lump of paste at the beginning of molding coffee pot.

Figure 11.82. Molded body of a coffee pot seated on a turning device (*gäncho).*

The neck of a coffee pot is molded after toting up two coils of paste and assimilating the lower part where it projects from the body using the exterior surface of the bamboo piece (*känu*), which helps to smooth the neck in the making. As potters add up a second coil, they insert their middle finger to shape the interior while they use the *känu* to assimilate and smooth the exterior. Potters also trim the edge of the neck using their thumb and index finger while inspecting the shape in the process. *Hata'u* (*Haaxaa'uu*) is the process by which potters use a piece of cloth (*erbe*) to smooth the neck. A handle, *harko* (*haarkoo*), is produced after a coil is prepared in a similar way with Kafecho and Majang potters. Since it is an addition on an already molded pot, assimilating it on the exterior part is necessary.

Figure 11.83. Smoothing the neck of a coffee pot with a piece of cloth (*erbe*) on a *gäncho*.

Decorating the pot is the next stage in the production of coffee pot (*jäbäna-qahwa*). One type of decoration used by potters is *säbbätä* (*sabbata*), a rope-like decoration circumscribing the middle part of the body. It is produced by coiling a thin rod-like paste called *riritu* (*riiriituu*) and wrapping around the middle part of the body. Coffee pots are often decorated with *muchä* (*mucha*) seven breast-like nods, two in opposite direction on the body, two in the front and one on the upper part of the handle.

Potters also make *märta* (*marxaa*), a small coiled-paste attached on the lower part of the neck. Once *märta* and *säbbätä* are shaped from coils of paste, slanting lines are produced by the edge of the *känu*. With this process of decorating, the molding of a coffee pot is completed. A further smoothing is done three days after the completion of the molding of a coffee pot with a piece of bamboo. Once the part above the base dries, potters work on the base (*udu*/*uduu*) of the coffee pot. Removing the thicker part of the paste, *dägugu* (*daguuguuu*), and thinning the paste are the two important tasks before the culmination of the production of a coffee pot.

Figure 11.84. Decorating a coffee pot with *känu*.

Some Oromized Yäma potters at Mänänewa village of Märäwa produce three different types of coffee pots: (a) coffee pots without spout (*jäbäna-näzriljabanaa-nazirii*) or *jäbäna-qärina* (*jabanaa-qarinaa*),[178] (b) coffee pots with two spouts (*muĉä/mucha*)[179] and double handles (*harko)*[180] and breast like decorative projection known as *harmä* (*haarma*),[181], and (c) coffee pots with a handle and a spout. The number of decorative projections (*harmä*) on the second type of coffee pots explained under (b) is random but such coffee pots with seven *harmä* are used to prepare coffee on Wednesdays locally called *arbi* (*arbii*).[182] In Quranic context, seven is a sacred number as it symbolically represents the seven gates of heaven although its exact association with coffee pots might be related to the days of the week.

[178] Spoutless coffee pots are used to prepare coffee and gratify the creator for helping to accomplish successfully duties.

[179] The appellation - *mucha* – is applied for the spout of a coffee pot, which resembles the teat of an animal.

[180] Two terms, *qäbäno (qabanoo*) and *harko* are interchangeably used to denote the handle of a coffee pot.

[181] While *mucha* is applied for teats of animals, the term "*haarmä*" literary refers to the human breast. The pattern of decoration appearing on the pots must have been the reason for the use of different terms.

[182] The term is derived from the Amharic "*arb",* meaning Friday. The most widely used word for this day among muslim Oromos is *Jimatä* (*Jimaata*).

It is the person possessed by a spirit (*ayanä*), who determines the type of decoration and the number of spouts of the coffee pot before production. Spoutless coffee pots have layers of rippled decorative patterns called *marta* (see figure 11.35). They are also made for people possessed by a spirit (*ayanä)* and for individuals practicing *atete,* a female ritual invoked for the health, fertility, and childbirth or for special occasions particularly preparing coffee on Mondays, Wednesdays and Fridays. Like the coffee pots with double handle and double spouts, these types of coffee pots are manufactured either by the order of a person possessed by *ayanä* or purchased in a market. The third category of coffee pots comprised of the common type of coffee pot with a spout and a handle incised with what looks like plant impressions.

Figure 11.85. *Jäbäna-näzri*: Rippled decoration on the base of the neck and the body of a spoutless coffee pot (top). A coffee pot with double handle and double spout decorated with breast like projections circular incisions (bottom).

Figure 11.86. Incised coffee pots of ordinary use.

The Production of Coffee Roasting-Griddle (***Ele-Bicu***)

The *chaîne opératoire* in the production of coffee roasting-griddle (*ele-bicu*) among Oromized Yäma potters is analogous with the few Oromo potters at Gänji-Dalächo. Paste required for production is prepared by mixing dry clay with water and silty straw of *tef* (i.e *mato*). Then potters batter the wet clay with one leg. This process of mixing the clay with straw by battering is called *d'itu* (*dhiituu*). In the next stage called *sukumu* (*sukumuu*), potters turn the paste squashy and then add *mato* to make it stronger. What follows is the molding of the griddle. The initial steps in the molding processes are analogous to the techniques employed by Oromo potters at Gänji-Dalächo. One major area of difference is that Oromized Yäma potters use *d'omo* (*dhomoo*), a piece of stalk from *ensät* tree in thinning the griddle. Smoothing the griddle is done by thinning the upper surface of the griddle called *gära* (*garaa*) and shaping the edge. In smoothing the circular edge of the griddle (*gango/gaangoo*) or *nano* (*naanoo*), potters rotate a piece of cloth (*erbe*) around the edge.

Figure 11.87. Initial stage of molding *ele-bicu* (top) and a final product (bottom).

Drying is the next stage in the *chaîne opératoire* of the production of coffee roasting-griddle (*ele-bicu*). Under sunny weather conditions, pots can dry well within three to four days. Nevertheless, in the rainy months, a griddle can take a week or more days to properly dry and get ready for firing. *Soqu* (*soquu*), scrapping the lower part[183]of the griddle using knife, is an important task to level the base and avoid a crinkled surface. The last of the *chaîne opératoire* at the pre-firing stage is rigu (*riguu*), polishing the upper surface using a small bottle, known as *rigidu* (*rigduu*), to create a shiny surface.

[183] In the context of pottery, the Oromo term, *jälä* (*jala),* denotes the lower part of griddles used in culinary activities.

Firing and Post Firing Treatment

Like many traditional potters in southwest Ethiopia, drying pots among Oromo potters in the study areas entirely relies on the prevailing weather conditions during and after the time of molding. During this ethnoarchaeological study among potters in Jimma, for instance, rainy conditions did not allow instant drying of pots. Due to this, it took about two weeks for pots to dry well.

Figure 11.88. From left to right: Stove, incense burner and coffee pot drying under the sun.

Prior to the firing process, potters polish the surface of coffee pots using plastic. The immediate stage following burnishing is beautifying the pot by painting it with a mixture of red soil (*bildime*/*bildiimee*) and water with a piece of cloth (*erbe*). The painted surface dries in about ten to fifteen minutes, and the pots are fired in a firing pit. Inside the pit, woods are laid at the bottom over which the pots are placed and covered by thin woods and straw (*gäläba*/*galabaa*) correspondingly. Firing pots in pits takes between 1:00 and 1:30 hours. After firing, some potters boil *hidi*/*hiidii* (*Solanum indicum L.*)[184] to coat the surface of pots while other simply clean the surface of fired pots with straw or a piece of cloth. Post firing treatment applying the technique of coating is also known among women Bertha potters, who make use of a mixture of water and crushed bark of different trees. Coating pots not only enhances the beauty of pots, but also makes them

[184] For the scientific name of the plant, refer Fichtl and Admasu (1994: 202).

non-stick and more impermeable thereby enhancing performance during cooking (Gonzaléz-Ruibal 2014:205). Among the Oromo of Wälläga, different substances are used in post firing treatment of pots employed in culinary practices. Accordingly, a mixture of water and flour of sorghum or *tef*, and a mixture of dry cow dung and straw of *tef* are used to treat stewing pots(*tuwe-hito*/*xuuwe-hitto*) and steaming pot (*tuwe-hafeli*/*xuuwee-hafeelli*), and griddles correspondingly (Bula 2011:318-319). Like the coating technique, these post-firing treatment methods are believed to be a mechanism of ensuring proper function in cooking.

The pots are wrapped with leaves of plants, such as banana and *ensät*, eventually tied and transported to the market. Pottery products are sold on weekly market days, particularly Thursdays and Saturdays. Coffee pot (*jäbäna-qahwa*) and coffee roasting griddle (*ele-bicu*) cost 20 *birr* each while incense burner (*girgirta*) is sold for 10 *birr*. According to my informants, the price of *jäbäna-qahwa* is relatively higher in the rainy season when many potters refrain from production of pots. The price of *ele-bicu* within the village of Märäwa is 5 *birr*. Some Oromo potters at Gänji-Dalächo also sell their pottery products in streets running through their villages to Agaro.

Figure 11.89.Transporting pots to the market, Märäwa locality near Jiren.

Figure 11.90.Oromo potter selling coffee pots in the outskirt of Jimma.

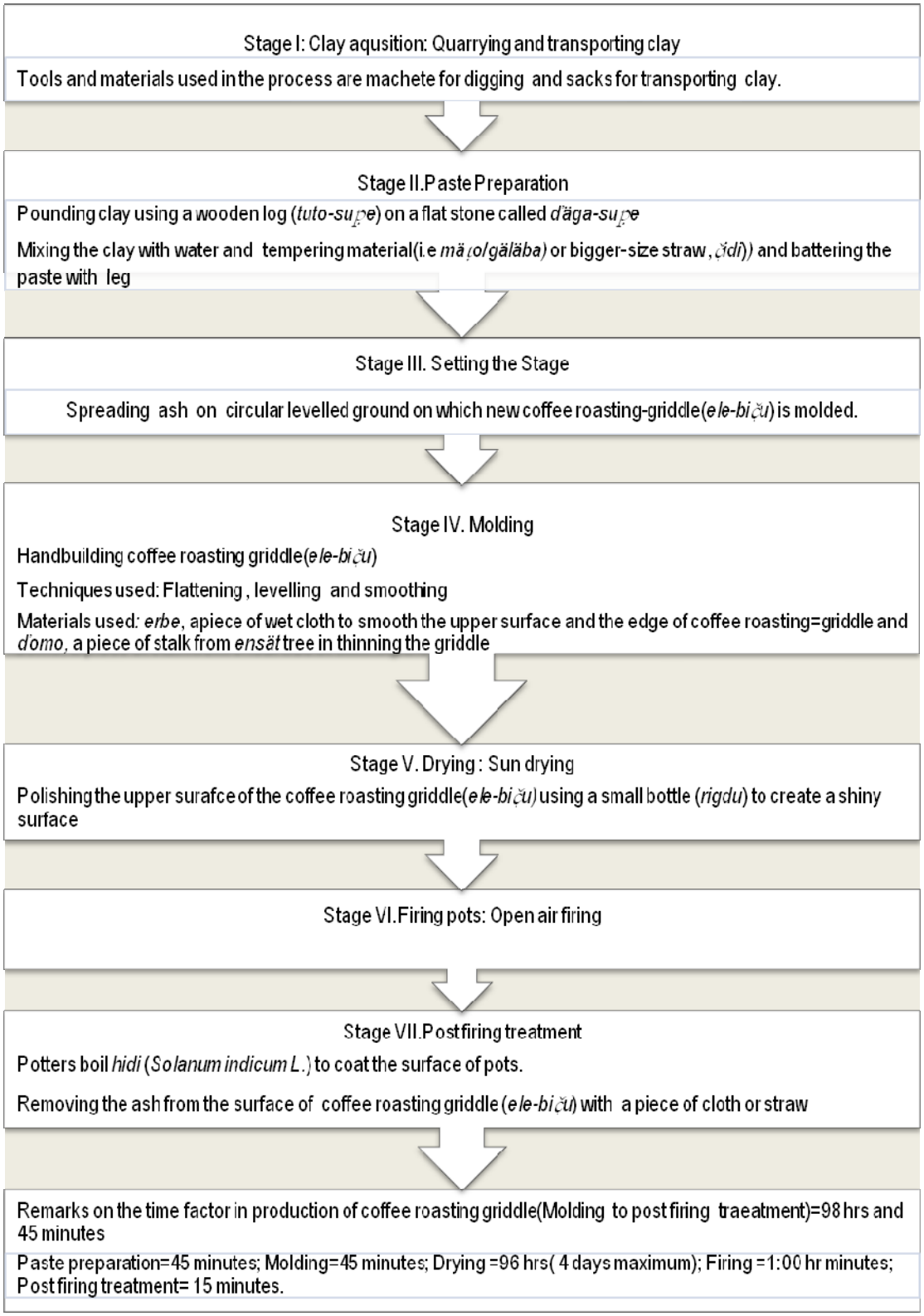


Figure 11.91. The *chaîne opératoire* for the production of coffee roasting-griddle (*ele-bicu*).

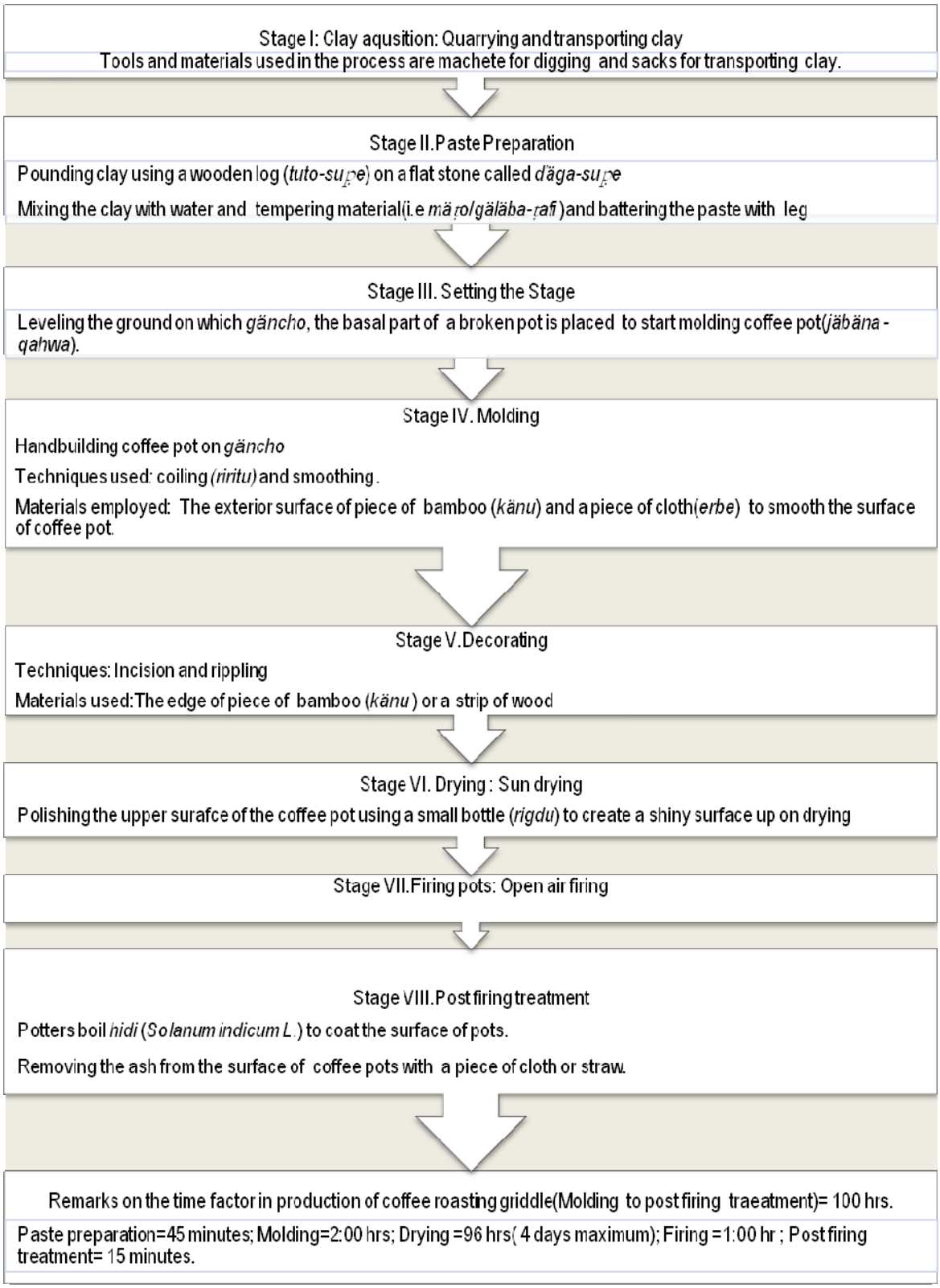


Figure 11.92. Vertical chevron list showing the *chaîne opératoire* for the production of coffee pot (*jäbäna-qahwa*) among Oromized Yäma.

11.3. The Social Position of Potters in Southwest Ethiopia (Kafecho, Majangir and Oromo)

11.3.1. The Kafecho

One of the fascinating aspects of dealing with pottery, at least from an ethnoarchaeological perspective, is the caste system of potters and their relations with non-potters and other artisan groups. From the very outset, it should be clear that potters belonging to the three subaltern clans of the Kafecho, namely the Mänjo, Manno and Mäniyo, comprise the lower stratum of the Kafecho community. In both districts of Decha and Adiyo, they settle near or within the forest to exploit forest resources and principally to make agricultural implements and produce charcoal. Their villages lie along the edge of rural settlements as in Boqa and Mankira localities in the district of Adiyo and Decha respectively. They are considered as the underdogs by the non-artisan clans (for example, Minjo, Matto, Dugo etc).

Marriage among the Mänjo, Manno and Mäniyo is endogamous. Belonging to the same clan, though a necessary condition for marriage, the identity of the couples at the sub-clan level is a determinant factor to realize a socially accepted marriage. As a rule, one has to marry within the clan but outside the same sub-clan. For example, marriage between the Cato and Amaro sub clan of the Manno is legitimate while marriage within the same sub-clan is socially unacceptable. Other manifestations of the caste system among the Manno include eating in a separate row during social events organized in celebration of marriage and mourning upon the death of an individual.

In terms of property and landownership, the three subaltern clans occupy a rather subordinate position to the dominant group. In the vicinity of Mankira, where the Mänjo live in the villages of Bächa and Arada-Gicha, Mänjo men grow edible crops and coffee for household consumption and some of them work for others in exchange for payment in kind for their labor. In some cases, the Mänjo depend on the land and resources of a non-artisan clan for sustenance. This could be seen in the district of Gimbo where I have met a Mänjo family living in a small hut constructed in a backyard of a Gomäro family the former being in service of the latter when it comes to labor in the field. This suggests the continuity, to a certain degree, of the servant-master relations known to be typical of the kingdom period. It is, therefore, not paradoxical that

the dominant groups, who receive the support of the three subaltern clans in labor during communal works, do not involve in similar engagements as a reciprocity for the service provided by the latter.

My own observation and an earlier study by Gezahegn (2001) indicate the submissiveness and oppression of the Mänjo. Manifestations of this subaltern dominant relation are seen in different spheres of the socio-economic life of the people. Accordingly, any labour service in time of weeding, clearing the land and harvesting is compensated in kind through the provision of drink and food. The Mänjo greet members of the dominant groups of the Kafecho with the phrase "*showoch moqoch qebbon*!" literary meaning "let me lie flat on the ground for you!"- a daily habitus that further epitomizes submissiveness to the dominant groups. A further sphere of submissiveness to the existing marginalization is seen in markets where potters from the three subaltern communities sit separately in the peripheral parts of the Markets at Mankira and Mära in the districts of Decha and Adiyo respectively.

From the perspectives of religion, the Mänjo living at Mankira have accepted Protestantism while some have maintained their affiliation to the Ethiopian Orthodox Church (EOC). Even then, their membership is seen as "fake," or questioned by non-artisans as the majority of the Mänjo lack a clear-cut affiliation to the EOC. Both the Mänjo and Manno are seen as unclean by others as they are associated with the eating of pigs, porcupine and dead animals, and meat left on skin of a freshly slaughtered animal correspondingly.

Due to variation in the location of settlements of the potters' clan and the absence of close ties through neighborhood, there is a loose social relation between the three subaltern groups and the dominant group. This is manifested in the absence of communion through coffee consumption and exclusion in marital relations. On the other end of the spectrum, the three subaltern clans do not intermarry, do not practice communal festivals including partaking in collective coffee ceremonies, and do not assist each other in collective activities in time of death and harvest. This lack of solidarity among subaltern communities is difficult to be explained with certainty. Even then, two apparent reasons, the existence of social distancing amid the groups and probably the lack of common ethnic origin, can tentatively be mentioned as provisional explanation of the argument. The social distancing and the presence of a *quasi*-hierarchical structure amid the subaltern communities is strange but best exemplified in the feeling of superiority of the Mänjo over the Manno. On the other end of the spectrum, members of the dominant groups, who consider the Mänjo as inferior and "unclean", believe that meeting the Mänjo in the morning is a sign of good luck while to meet a

Manno is seen as a bad lack. This attribution of good fortune up on meeting the socially despised Mänjo is attribuited by Gezahegn (2001:21) to the "Manjo hatred of and supremacy over the Manno." This explains the presence of the presumed hierarchy within the subaltern communities.

11.3.2. The Majangir

Unlike their Kafecho and Oromo counterparts, Majang potters in the study areas live in similar socio-cultural and economic contexts with non-artisans. This is manifested in the pattern of settlement and nuptial relations. While potters live in villages settled by other members of their own community, it is difficult to identify precisely the artisanship of making pots with a particular Majang clan. Evidently, potters I worked with at Goji, near Teppi belong to different clans (for example, Kabulenkay,[185] Bajenkay, Kawtenkay, Dawrenkay, Asenkay, Garienkay and Melankay). Even then, concluding marriage outside a specific clan or a similar social unit (exogamy) is common. Marital ties among present day Majangir are very much alike to the type of prescribed marriages during Stauder's time when marriages were concluded between affines ideally non-kins (see Stauder 1968;1971). During my stay among the Majangir, I have not come across couples belonging to the same clan, an experience which further supports that exogamy is a socially accepted marriage. There is also no alienation of potters and their family members in any of the socio-cultural activities of the community. In this context, it becomes difficult to speak of a duality between potters and non-potters, as noticed in Kafa and Jimma. Collective coffee drinking is a norm and thus potters share coffee with members of immediate neighbors; they equally host and participate in communal works and in feasts including funeral and post funeral events.

From an economic point of view, a potter's family use income from the selling of pottery to cover household needs although growing crops and coffee remains the mainstay of their economy. Men hardly involve themselves in any of the activities related to pottery, but in the production of crops including coffee. Widowed and divorced potters take the responsibility both in the field and in households and have a social status analogous with their non-artisan neighbors. In some cases, potters can have larger compounds and granaries suggesting that they are not economically the underdogs compared to non-potters.

[185] Oral traditions suggest the presence of over 100 clans within the Majangir proper. Like the Kafecho and the Oromo, individuals identify themselves through their paternal root. For instance, a male individual adopts the clan name Kabulen if his father belongs to the Kabulen clan. The suffix-"*kay*" stands for the feminine and hence, Kabulenkay. The same is true of members of the other clans.

Pottery among the Majangir is considered as a skill and as means of subsidizing household needs. Potters, however, are not viewed as a separate social class. The roots of the absence of a caste system among the Majangir is chiefly attributed to the egalitarian ethos of the people maintained to date. Conversion to Protestantism and the resulting biblical notion of equality before God (*Wakot*) is an additional, yet a crucial factor. Ironically, conversion to Christianity or Islam has not resulted in further equality in Kafa or Jimma.

11.3.3. The Oromo

As in most parts of Ethiopia, almost all artisanship and craftsmanship in Jimma, excepting spinning and basketry, is in the hands of special castes. Potters and handy men, known derogatively as *fuga,* along with smiths, weavers, tanners, beehive makers and beekeepers constitute the major castes in which we find both the Oromo and representatives from other Kafa, Janjero [Yäma] and Gurage (Lewis 2001:53). The concern, here, is on the Oromo and Oromized Yäma in Jimma zone.

At Gänji-Dalächo locality of the district of Gomma, pottery is practiced by women of the different Oromo clans living in the area. Amongest them are the Qalaɪa/Qalaxaa, Hinägänji(Hinaganjii), Hinqaɪani (Hinaqaxanii), Hinärugi (Hinarugii), Sorkosi, Balto(Baaltoo) and Tulämä (Tuulama). Unlike the three subaltern clans in Kafa, exogamy is the subscribed marriage amid Oromo potters of the area. For example, a potter from Hinägäbäni (Hinagabanii) clan can marry a man from a potter's family of the Hinäqäni (Hinaqanii) clan. A potter from Hinäzäbäni (Hiinazabanii) clan can marry a man from Sorkosi (Sorkosii) clan. Men do not essentially specialize in craftsmanship and can engage in agricultural activities. Likewise, not all women of a particular clan practice pottery. The marginal social position of Oromo potters can be seen in the isolated nature of their settlements and they are still looked down by some as "inferior", but these attitudes are apparently declining nowadays. Potters participate in support associations (*iddiri/iddirii*)[186] in which there are potters and non-potters although the consumption of coffee in potters' households is limited to the family level and between immediate neighbors. Likewise, Oromized Yäma potters at Molle and Märäwa are subaltern groups of community who live in separate localities to the south and west of Jiren. Marriage among Oromized Yäma potters is endogamous, but marriage within the sub clan (*qace/qacee*) is forbidden. Accordingly, a boy from a potter's family can marry a girl from a potter´s family. However, an Oromized Yäma potter can marry a man from a potter's or a non-potter's family since

[186] The word is derived from the Amharic "*iddir."*

the basis of the marriage is clan identity. Similar to the Kafecho and other Oromo potters in Gomma, the identity of the sub-clan is a significant factor in concluding a marriage. For example, a young man from the Doyo sub-clan can marry a non-Doyo woman. I have come across an Oromized Yäma married to two women from Mänu(Manuu) and Habiba(Haabibaa) sub-clans (*qacɛ)*. What is prohibited as in the other three cases is marriage within the same sub clan. Marriage with other ethnic groups such as Kafecho and Kulo is another possibility. Potters participate in mutual aid associations with other communities and share coffee with their neighbors (i.e potters and non-potters). Most of the men married to potters explain pottery as an art practiced by their ancestors. Some women born from a potter's family might not practice pottery, even if they marry to men whose mothers or relatives practice pottery.

Although pots are widely produced among the Oromized potters at Molle and Märäwa, many children born into potters' family do not practice pottery today. As to social relations, there are about fifty households inhabited by Yäma-Oromo where coffee is shared between neighbors of the same clan. Oromized-Yäma potters generally occupy a lower social position compared to their non-potter Oromo neighbors. The attitude of non-potters towards potters is summarized in a statement made by a man from a potter family as follows: "Some rude people call us *fuga*. What we do is producing items used by the people [non-potters]. We have the same body like them. We have five fingers. We all die.'' The attitude of non-potters towards potters is generally capricious. An anonymous Oromo male informant at Jiren speaks of the lower position of potters in the following manner:

> I do not want to marry them. They despise themselves. They are called *fugaa*. I know many people who do not want to marry them. Nevertheless, they participate in the same *iddir* with others. Many people do not want to eat with them because they are seen as dirty [unclean]. They marry each other.

Another Oromo informant from the same area buttresses the above view stating the peaceful co-existence between Oromized Yema potters and non-potters from his own perspective:

> We live peacefully with the potters of Molle. We buy their products like griddle for baking the Ethiopian unleavened bread (*ele-bidena*), cooking pot (*disti*) and coffee pot (*jäbäna-buna*/*jäbäna-qawha*). They choose their own life partner and marry each other. They do not want others because they believe that if they marry with members of other ethnic groups, they cannot make good pots. They believe that if they do that the pot they make will lose its quality and break. Nevertheless, we have the same *iddir* and partake in communal work but never conclude marriage with them. We share coffee with them. However, they do not like to mix.

The social position of potters among the three ethnic groups (Kafecho, Majangir and Oromo) is characterized by certain similarities and differences. Caste system is not a characteristic feature of potters among the Majangir who live with and intermarry with any of the clans. On the other end of the spectrum are the Mänjo, Manno and Mäniyo potters of the Kafecho who live in separate villages and occupy the lower stratum of the society. Oromized Yäma potters at Molle and Märäwa near Jiren and Oromo potters at Gänji-Dalächo are subaltern to the non-artisans living in their surroundings. Nonetheless, marriage among the latter is rather exogamous and the caste system is to some extent beginning to fade away as it no more serves as a basis of concluding nuptial relations and partaking in support associations. Still potters in Kafa and Jimma occupy a marginal social position compared to non-artisans.

11.4. Comparing Coffee-Related Pottery among the Kafecho, the Majangir and the Jimma Oromo

The way coffee related pots are produced and the socio-cultural context in which potters work and live are very fascinating aspects, which require further elucidation. In this section, I will comprehensively consider a variety of variables to assess similarities and differences among Kafecho, Majangir and Oromo potters thereby by presenting comparable choices of techniques in pottery production.

There is a major difference both in the type of materials involved in the acquisition of clay and paste preparation. Potters in coffee growing regions in Kafa (Mänjo and Manno) employ materials used in the production of coffee (for example, baskets like *kofo* and *zämbil*) in transporting clay while these materials are unknown among potters (i.e Mäniyo) living in Adiyo, a non-coffee growing part of the highlands of Kafa. Similarly, the Majangir use *kante,* a basket employed in harvesting coffee, to transport clay. Common to Kafecho, Majangir and Oromo potters in coffee growing regions of the study area is the use of machete in the process of quarrying clay. It is also used in thinning the base of coffee roasting-griddles by Oromo potters at Gänji-Dalächo near Agaro.

The technique of paste preparation is another principal area of variation among potters in the study area. Mänjo and Manno potters in Kafa, like their Oromo counterparts at Gänji-Dalächo near Agaro, and some Oromized Yäma potters near Jiren in Jimma, use a wooden log and a flat stone to pound clay and mix the clay with water and temper. On the other hand, pounding clay and paste preparation among Mäniyo potters

in Adiyo, like some Oromized Yäma potters, do not require the use of the flat stone as paste preparation takes place on the ground. Battering pounded clay on the ground using feet is a technique peculiar to the later. The Majangir use wooden pestle and wooden barrel in paste preparation. Unlike potters in Kafa and Jimma, the Majangir use no tempering material in the process of preparing paste. The following table presents a synoptic summary of materials used in paste preparation and trends in the use of paste.

	Potters	Materials used in preparation of paste	Tempering material (straw)	No tempering material
Kafa	Mänjo	Wooden pestle(t*uto*) and a flat stone (*šišo-taqo)*		
	Manno	Wooden pestle(t*uto*) and a flat stone (*šišo-taqo)*		
	Mäniyo	Wooden pestle		
Teppi	Majangir	Wooden pestle(*ud'e*) and wooden barrel (*gonee*)		
Jimma	Oromo	Wooden pestle(*bokku*) and a flat stone *(d'äga-supe)*		
	Oromized Yäma	Wooden pestle(*bokku*) and a flat stone *(d'äga-supe*)		
		Wooden pestle(*bokku*)		

Table 11.7. Synoptic summary of materials used in paste preparation and trends in temper utilization.

The choice of materials in the production of coffee related pots greatly affects techniques used during production process. This is mostly conspicuous in the molding of coffee pots and coffee roasting griddle which involves the use of a supporting tool (For details on the type and nomenclature of materials used in the molding process, see tables 11.8-11.11.10). The use of such tools in the production of coffee pots is known among Mänjo and Manno potters in Kafa, Majang potters and Oromized Yäma potters near Jiren, Jimma. The same is true of the production of coffee roasting-griddle among the Majangir and Oromo potters of Gänji-Dalächo. The implication in the use of a supporting base in hand molding of both coffee pots and coffee roasting griddle is the presence of technical choice in the molding of the pots. The advantage in the use of supporting tools in the production of pots has to do with the relative ease in hand building process. Accordingly, potters using supporting materials mold coffee pots and coffee roasting-griddle in a stationary position as they can easily control the shape of the pot under production. It means that potters could produce pots in a seated position without requiring further movements while molding,

smoothing and decorating pots. There is a marked variation in the degree of the application of the supporting tools in molding pots among potters of the three ethnic groups in the study areas. The use of these tools is pronounced among Majang potters who entirely produce coffee-related pots on supporting tools made of broken pots or griddle where as the use of such materials is absent amongst Mäniyo potters in Kafa.

		Materials used in molding pots	Coffee pot (*bune-qondo*)	Coffee roasting griddle (*bune-midado*)
Kafa	Mänjo	*Tito,* a broken part of the neck of a certain pot on which the molding of the coffee pot progresses. Circular hole covered with *wälo*(leaf of *ensät*)		
		Leveled ground covered with straw or ash		
	Manno	*Tito*		
		Leveled ground covered with straw or ash		
	Mäniyo	Circular hole covered with *wälo*(leaf of *ensät*)		
		Leveled ground covered with straw or ash		

Table 11.8. Synoptic summary of materials used in molding pots among potters in Kafa.

		Materials used in Molding pots	*Mätäge*	*Kebet-karionk*	*Kebet-sid'anonk*	Coffee roasting-griddle (*D'äyen mu'eko*)
Teppi	Majangir	*Lokoy* (the base of a broken pot) or *lokoy* made to serve as a supporting tool on which molding pots takes place				
		Old coffee roasting-griddle or a metal plate				

Table 11.9. Synoptic summary of materials used in molding pots among Majangir potters.

		Materials used in Molding pots	Coffee pot *(Jäbäna-qahwa)*	*Waciiti*	*Hartu*	Coffee roasting- griddle (*ele-bicu*)
Jimma	Oromo	Broken part of a griddle				
		Ele-batu, an old griddle on which a new coffee roasting griddle is replicated.				
	Oromoized Yäma	*Gäncho,* a broken pot on which molding pots takes place				
		Leveled ground covered with straw or ash				

Table 11.10. Synoptic summary of materials used in molding pots among Oromo potters.

There also exists a striking difference in terms of the typology of coffee pots produced in the study area. Spout less coffee pot (*bune-qondo*) produced in Kafa is either plain or decorated with simple incisions and ripples. Incised coffee pots are also common among the Majangir and Oromized Yäma potters near Jiren in Jimma who also decorate pots with rippling. Some types coffee pots are also preferred over the others due to ideological orientation or pottery products of a certain group might not be used for ritual reasons. For example, among the Oromo in the study area, some coffee pots are especially produced for ritual reasons and the type of decoration and the number of spouts are determined by a person possessed by a spirit (*ayanä*), before production. Spoutless coffee pots with layers of rippled decorative patterns (*marta)* are made for people possessed by a spirit (*ayanä)* and for individuals practicing *atete,* a female ritual invoked for the health and fertility and childbirth or for coffee prepared on special occasions(i.e on Mondays, Wednesdays and Fridays). On the other end of the spectrum, pots bought from Mänjo potters in Kafa are not used in rituals-a practice that largely reflects the "uncleaness" of the socially marginalized Mänjo.

As with many other groups in the highland parts of Ethiopia, pottery production among the three ethnic groups (Kafecho, Majangir and Oromo) in southwest Ethiopia is an exclusively women's specialization. The role men is restricted to such non-artisan activities as quarrying and transporting clay, preparation of firing pit, firing pots, transporting and selling pots. In fact, there is a marked intra-ethnic and inter-ethnic variation in the role men play the production process. While Mänjo, Manno and Oromo men seldom support women

in quarrying clay and digging firing pit, Mäniyo men have a rather meaningful role compared to Mänjo and Manno men as they assume full responsibility in quarrying clay, firing pots, transporting, and selling pottery products.

Majang men barely participate in any of the stages in the production of pots. In the past, some men did assist their potter wives while quarrying clay and digging firing pits. Presently, the bulk of the labour in quarrying and transporting clay is done by women alone while men can sometimes assist in digging firing pit, a task that does not require regular engagement. The meager role Majang men play in pottery production is rather strange compared to their Omotic and Cushitic neighbors with which they live closely. It is also comparable with some of their Nilo-Saharan relatives along the Sudanese-Ethiopian borderland (for example, the Bertha, Mao and Gumuz) where men, not only involve in such activities as burnishing, firing and transporting pots to market centers, but independently manufacture coffee pots (see Bezabih 2010; Gonzàlez-Ruibal 2014; Leverone 1992).

Typological parallels to Majang *kari* pots, *kebet-karionk* and *mätäge* are the *k'are-kondo* and *mätäge* of the Sabu[187](Shabo/Mikeyer) living in Gambela, who make use of these pottery products in the preparation and consumption of *k'aro*, a similar infusion to the Majangir *Kari* (Gonzàlez-Ruibal *et al.* 2013). The production and use of similar pottery required for the preparation and consumption of *kari* among the Majangir and the Sabu is a reflection of the cultural influence the former over the later.

Coating is used on coffee related pottery, particularly on coffee roasting-griddles and coffee pots produced by potters in Kafa (for example, Mänjo, Manno and Mäniyo) and Oromized Yäma potters near Jimma. It is used on pottery products, as otherwise pots would be unsuitable for holding liquids due to porosity. In addition to the functional aspect of glaze, they can form a variety of surface finishes including the degree of gloss and matte. There is an additional element relating post-firing treatment of coffee pots at household levels. In Kafa, for example, not all potters apply *eko* (the milky fluid prepared from *ensät*) after firing pots. Coating pots with boiled *ekko* can be done at household level by individuals who just bought new pots. Besides, there is an additional treatment of pots to avoid further porosity. The Kafecho use the term *koro* (*koroo*) to the process of preparing pots before they are used for the intended purpose/s. In this context,

[187] The Sabu, a small group of people estimated between 1000-2000, speak a language relatable the Koman group and follow traditional beliefs with a great deal of cultural influence from the Majangir and the Komo (Gonzàlez-Ruibal 2014:78).

pre-use treatment of coffee pots (*bune-qondo*) at household level is a mechanism of producing good odor and a further means to ensure strength of pots. The most common way of pre-use treatment of coffee pots has to do with one of the following: (a) boiling residue of coffee left after the consumption of the infusion, (b) preparing brothel from flour of *tef* or (c) boiling milk. A good pre-use treatment of coffee pots takes longer time and boiling could continue even after the boiling liquid spills over the pot. Unlike coffee pot, coffee roasting-griddle (*bune-midado*) can be used without further pre-use treatments at households although daubing the surface of the griddle with *ekko,* a milky fluid from *ensät*, was common in the past.

Unlike the Kafecho, Majang potters in the study area do not apply any coating material in post firing treatment although pre-use treatment of coffee and *kari* related pots at household levels is not uncommon. The Majangir use the term *tersäyät* (*tersayat*) to refer to the overall process of pre-use treatment of pots. Coffee residue left after the consumption of coffee is boiled in a new coffee pot (*jäbänoy*) until it brims over the pot. This results in good aroma so that the new coffee pot can then be ready for preparation and consumption of coffee. While *kari* pots(*kebet-karionk* and *kebet-sid'anonk*) and coffee roasting-griddle(*d'äyen-mu'eko*), can often be used without further treatment, *kari*-cups(*mätägoy*), in a similar fashion with coffee pots, are treated before use by boiling *jäwänak,* residue of *kari* . In the process, the liquid from the boiling residue improves the scent of the new cup and darkens the exterior as it overflows.

Aside from post firing treatment of pots, the Oromo of Jimma also treat coffee-related pots before employing them for the designed use. The process of pre-use treatment of pots is known as *silesu* (*sileesuu*). Akin to the Kafecho, there is variation in the methods applied in the treatment of coffee pots and coffee roasting griddles. Animal dung, straw and aromatic leaves are boiled in a new coffee pot (*jäbäna-qahwa*). The steam produced because of heating these concoctions changes the odor of the pot. On the other hand, coffee roasting-griddle (*ele-biɔu*) is treated by placing the griddle on fire set inside a hearth and daubing the surface with *gomän-zär* (*Erucastrum abyssinicum*–(*A.Rich*)[188] and straw using a piece of cloth.

[188] It is an erect annual herb that sparsely grows in disturbed areas, fallow ground, and in *tef* fields between 1000 and 2600 masl. The leaves are used as vegetable whereas the seeds as a source of oil (Fichtl and Admasu 1994:82).

CHAPTER 12

CULTURAL FORMATION PROCESSES AND TAPHONOMY OF COFFEE BEANS

Archaeological evidence of past societies and environments is the result of cultural and non-cultural (natural) formation processes (Schiffer 1972b; 1976; 1983; 1987). Combining ethnographic and ethnoarchaeological data along with results of experimental archaeology on the preservation of coffee beans, this chapter addresses site formation processes of pottery related to the preparation and consumption of coffee and the taphonomy[189]of the plant.

Schiffer (1987:7) defines cultural formation processes as "the processes of human behavior that affect or transform artifacts after their initial period of use in a given activity." The impact of non-cultural[190] (natural) factors, as a significant dynamic in the switch from systemic context[191] to archaeological context, is indisputable though this ethnoarchaeological study largely implies human agency (C-transforms) as a major factor in the whole formation processes of pots related to the preparation and consumption of coffee. In view of that, the chapter deals with the causes of abandonment, the relations between human behavior at the time of abandonment and the resulting patterns of discard.

Anchored on the transformation of materials between and within the archaeological context (A) and systemic context (S), Schiffer (1976) has identified four types of cultural formation processes: the S-A or Systemic to Archaeological processes, the A-S processes transform materials from the archaeological context back to the systemic context (Schiffer 1976) and are also known as reclamation processes (Schiffer 1987). The A-A, also known as disturbance processes(see Schiffer 1987:121), denotes transformation of materials from state to state within the archaeological context (Schiffer1976). Under the A-A processes,

[189] Originally used for "the study of the transition (in all its details) of animal remains from the biosphere into the lithosphere," the term taphonomy is now typically conceived to include plant remains (see Lyman 2010:1).

[190] Non-cultural formation processes are defined as "any and all events and processes of the natural environment that impinge upon artifacts and archaeological deposits" (Schiffer 1987:7).

[191] Schiffer (1972b:157) describes systemic context as "the condition of an element which is participating in a behavioral system." Reid (1995:19) further elucidates this concept as being the behavioral system, which once contained the material, remains of the archaeological record.

unlike reclamation processes, the materials never really re-enter the systemic context, even though their location and form may be altered (Schiffer 1987:121). The S-S or Systemic to Systemic processes denote transformation of materials from state to state within the systemic context (Schiffer 1976), and are also known as reuse processes (Schiffer 1987:27). The main concern here is, however, on paths that lead from S-A, also called cultural deposition by Schiffer (1987). Even then, it in no way tries to be a comprehensive or definitive treatment of the subject, but it is insightful of the transforms that effect and affect the archaeological record of both pots used in the preparation and consumption of coffee and the coffee bean itself.

The data presented in this chapter comprise a set of analysis on four different issues: (a) use life of coffee pots, (b) abandonment of residential areas and the resulting patterns of discard, (c) midden sites, and (d) assessment of preservation state of coffee beans through experimental studies. While theoretical orientations on site formation processes are reasonably significant, insights from my ethnoarchaeological and experimental studies suggest how archaeologists may be able to surmise a range of natural and cultural processes from an archaeological record in question. In the succeeding parts of this chapter, therefore, I outline the primary and secondary use of coffee related pottery, pottery use-life, the association between pottery and use life.

12.1. Life Cycle (Use Life) of Coffee Pots and the Spatial Pattern of Discard

One of the central concerns of this dissertation is assessing the life cycle of coffee pots and related materials used at processing and consumption of the beverages prepared from coffee beans and coffee leaves. Notwithstanding the difficulty to document the life history of the entire set of materials used in the cultivation, processing and consumption of coffee, the accent on coffee-related pottery provide a certain degree of information on how the transfer of these materials from systemic to archaeological context occurs.

Prior to the presentation of data on the subject, it is important to make some remarks on tools used at the production stage. Unlike pottery products, metal implements such as the machete and digging implements (the eye-hoe, fork-hoe, *kotero*, and *gässo*) have longer life span. What farmers frequently do is changing the wooden-handle of such implements and keep on reusing them for relatively longer periods. On the other end of the spectrum, implements made entirely of wood, chiefly those used in preparing coffee fields

(*horda*, *hoko, gomo,* and *oko*) by coffee cultivating farmers of the Majangir, the Kafecho and the Oromo, are simply disposable and replaceable upon breakage. Identifying archaeological signatures of similar wooden implements in the archaeological context is quite difficult owing to the poor preservation conditions of organic remains in wet environments of southwest Ethiopia. Note should, however, be made that making conclusive remarks on the type of agricultural implements involved during the onset of coffee cultivation in the region is, irrefutably, far from clear. Nonetheless, given the simplicity involved in the production and use of wooden implements and the availability of the required raw material (wood) for production, it is plausible that wooden implements were intensively in use than today. The subsequent paragraphs of this chapter depict the life cycle of pottery products used in the preparation and the consumption of coffee and *kari*.

It should be clear that tools, including pottery, might be discarded in the locales where they were used, such as activity areas, and in the process become "primary refuse" or may even be transported from the activity area and in due course discarded all together with other items, and form "secondary refuse" (see Schiffer 1972b:161;1976:30; 1987:58). The S-A processes, also known as cultural deposition by Schiffer (1987), consist of discard of primary refuse or secondary refuse (King and Miller 1991; Matthew *et al.* 1997; McKee 1999; Petraglia 1993; Ross 1985; Schiffer 1989), maintenance processes either at regular or adhoc basis (Schiffer 1987; South 1979), loss (Schiffer 1976;1987), ritual caches and abandonment (Schiffer 1987). The whole concept of use-life of coffee-related pottery presented here rests up on what Schiffer and Miller (1999:22) call "life-history approach" a concept further considered by different scholars (for instance, Gosden and Marshal 1999; Holtorf 1998; 2002; La Motta and Schiffer 2001). In view of that, the life history of an artifact entails a series of interactions and activities (behaviors) and consequently, a range of processes beginning from the acquisition of raw materials to the final discard or abandonment of the object/s in the archaeological record. In the flow model of durable elements, Schiffer (1972b:158; 1973:58) identified five basic processes in the systemic context (procurement, manufacture, use, maintenance and discard) accounting for the formation of a significant part of the archaeological record bearing in mind temporal and spatial displacement of an object caused by storage and transport activities.

Artifact life histories, primarily of pottery products, comprise an array of interconnected processes relating the acquisition of raw materials (clay and tempering materials), molding pots, surface treatments (smoothing and painting its surface) of clay, drying, firing, transporting, exchange, use, storage, maintenance, reuse and discard (Schiffer and Miller 1999:22). Nonetheless, not all objects pass through a

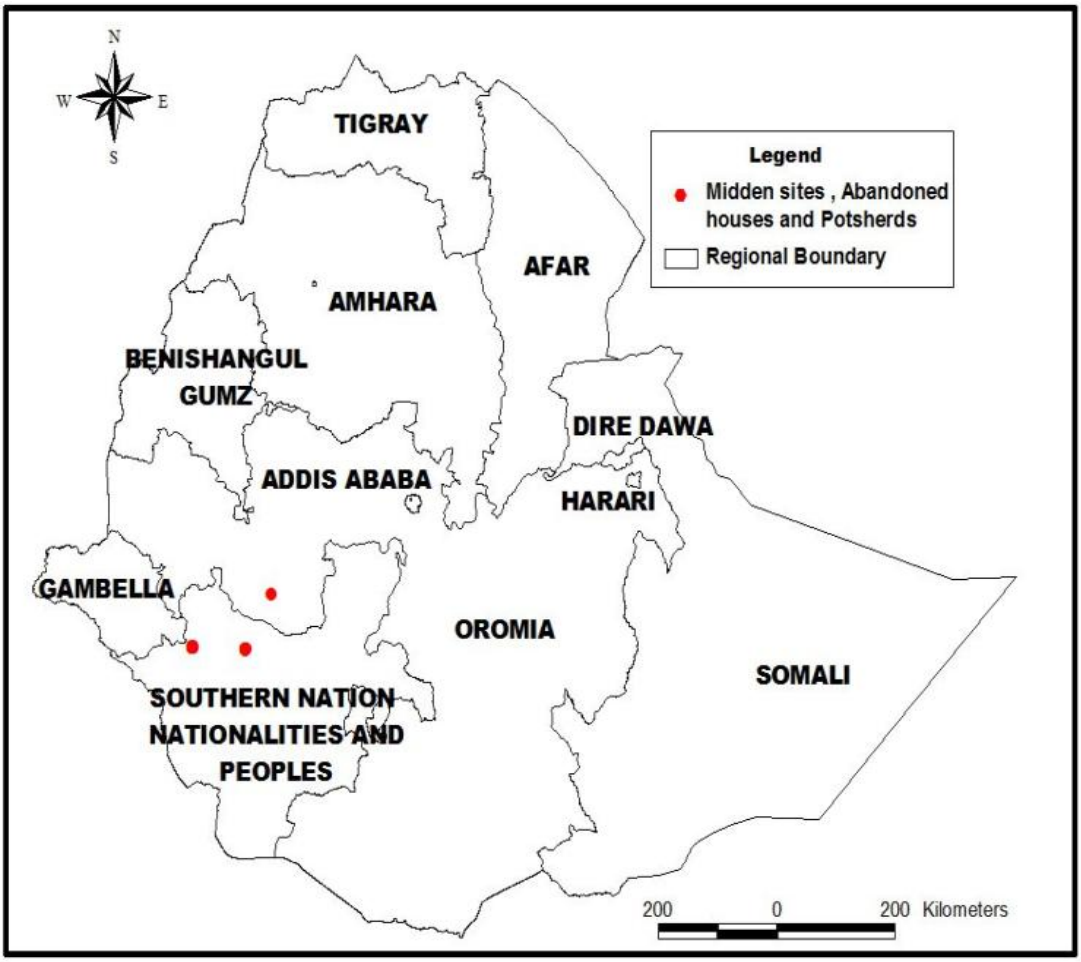
unilateral path (see Schiffer 1972b) since their use in a systemic context ends at different stage of the system. The life history approach is a useful method to construct a pragmatic, predictable and analytical model about the cultural constituents of the formation processes of the archaeological record through the study of material components in their systemic context (Schiffer 1972b; La Motta and Schiffer 2001). Schiffer views the transformation of artifacts from systemic context to the archaeological context as signifying stages of decay rather than additional episodes of life. Compared to Schiffer's endeavor to understand the diverse contexts of deposition from the life histories of things, other scholars (for example, Thomas 1996a:162; Tilley 1996:273) studied the meanings and social roles of things from the different depositional contexts. An alternate perspective on the subject set forth by Holtorf (2002) indicates that life-histories of objects, in essence, do not end in deposition of things, but continuance of activities to the present. In light of this, the present study focuses on assessing the diverse contexts of deposition of coffee-related potsherds based on the examination of life history of coffee pots accentuating on the various stages: use, breakage, maintenance, reuse, and discard. This approach largely accords with Schiffer's conjecture on the application of the study of life history of artifacts in evaluation of depositional contexts of objects. In this regard, the study of present life-stories and associated contexts calls for an ethnographic approach which is (a) much more extensive but smaller in scope compared to the life history approaches; (b) employs direct observation and interviews as its principal methodologies (e.g Orton *et al.* 1993).

Based on his study on pottery among the Gamo, in southwest Ethiopia, Arthur (2006) postulates that the major reasons vessels break have to do with use and movement of vessels. Accordingly, he attributes breakage of cooking pots to thermal stress and shock during cooking. Breakage (cracking) at the base of cooking vessels results in leakage of liquids deterring the chance of reuse of pots for their primary purpose. On the other end of the spectrum are vessel types that continue serving their primary function even after cracking. These include bowls, dishes, narrow mouth small jars, and baking plates. In view of this, the examination of life cycle of coffee-related pots in the study area demonstrates that coffee pots, coffee roasting-griddles and *kari* pots pass through different stages beginning with their primary use at household level. Although Arthur (2006) considers the quality of production and the volume of pots as the two primary factors that control pottery use life, data on coffee pots do not accord with Arthur's conjecture on the relationship between volume and use-life. The general supposition on the presence of direct relation between vessel volume and use-life postulated by Arthur needs to be addressed with caution when it comes to coffee-related pots. This is because coffee pots are relatively smaller in volume compared to

other pots that are not affected by thermal stress used at individual households (for example, water jars and bigger pots used in preparing local beer). It is true that there is an evident variation in the volume of coffee pots in ethnographic context (see the annex attached at the end of this dissertation) though that, in itself, is not a sufficient condition to evaluate the variation in the use life of coffee pots. Therefore, factors other than volume (for example, quality of production, thermal stress and shock, the action of children and accidental breakage in use) considerably become essential in determining the use life of coffee-related pots.

The scatters of potsherds from coffee related pots are redolent of the various stages during which breakage of pots could have occurred. Breakage could occur at production stage chiefly due to errors in the pyro-technolgy (for example, the application of too much fire), accidental breakage while transporting pots, or during exchange, use and reuse of pots. Once a coffee related pot in a systemic context is broken, it may lose its primary use and the likelihood of reuse in a secondary context largely depends on the part affected during breakage or the economic status of a household. Even then, the rate at which a coffee-related pot transforms from the systemic context to the archaeological context varies depending on two primary conditions: the circumstances of breakage and the degree of reuse at household level.

The amount of scatters of potsherds from coffee-related pots in settlements inhabited by the Kafecho, the Majangir and the Oromo in the studied areas exhibit certain degree of differences. Potsherds of pots used in the preparation and consumption of coffee occur in large number in villages settled by the Majangir, the Kafecho and the Oromo respectively. This is ascribable to the degree to which the preparation and consumption of coffee necessitate the use of pots, the way pots are utilized at a household level and the context in which potsherds are disposed after breakage. I will turn to this subject in the next part on the pattern of discard at midden sites and abandoned houses.



Map 12.1. Map showing spatial distribution of scatters of potsherds, midden and abandoned houses.

Breakage of coffee-related pots, chiefly coffee pots and coffee roasting-griddles, can occur at the time of production particularly at the firing stage or while transporting pots to markets. Evidently, potsherds of these pottery products occur in manufacturing areas, particularly in and near firing pits where they are left at the place of breakage, or thrown away to the nearby fields. Such is the case among Mäniyo potters of Boqa in the district of Adiyo. The breakage of coffee-related pots at manufacturing site is illustrative of the possibility that the initial stage in the route of transformation of ceramics from a systemic context to archaeological context can occur before the onset of use at household level.

Figure 12.1. Broken coffee roasting-griddle (*bune-midado*) at a firing pit of Mäniyo potters, Kafa.

Breakage of coffee-related pottery products also occurs due to over firing at manufacturing sites, collision during use, cracking in the process of use and the action of children at household level. A variety of pots related to the preparation and the consumption of coffee (coffee pitcher and coffee roasting-griddle) and *kari* pots (*kebet-karionk* and *kebet-siďanonk*), and *kari* cups (*mätägoy*) can be broken at the firing stage, although breakage at this stage is rather negligible. Once a household starts using coffee pots and *kari* pots, cracking can sometimes occur at an early stage in use, which is attributable to poor firing at the manufacturing stage. When coffee pots and *kari* pots become permeable due to cracking, they are replaced by new pots while older pots can be used for a variety of purposes, as they turn leaky. In most cases, however, broken coffee related pots and coffee roasting griddle are discarded or used for such sundry activities as carrying fire to the hearth or from one household to another, and rarely as incense burner. This is, sometimes, the case among the Kafecho, the Majangir and the Oromo of Jimma. It is common to see broken coffee pots lying nearby living rooms and fences of compounds without properly disposing them with household trashes.

Figure 12.2. Broken coffee pots lying outside a living room, Coce-Lämi locality of Gomma.

Figure 12.3. A discarded incense burner at Molle, Jimma.

Sometimes, materials transform from state to state within the systemic context (Schiffer 1976). S-S processes also known as reuse processes (Schiffer 1987) exist in four different forms: lateral cycling (Schiffer 1972b:159; 1976:39; 1987:29), recycling (Davies 2002:63; Schiffer 1972b:158; 1976:38; 1987:29), secondary use (Schiffer 1976:28; 1987:30) and conservatory processes (Schiffer 1976: 38; 1987:30). Reusing a broken coffee pitcher without further maintenance is a possibility especially, if it is not leaky. Some households of the Kafecho, the Majangir and the Oromo make use of coffee pots with broken rims and partly destroyed spouts. This represents continuance in the primary use of artifacts without maintenance or further modification.

Figure 12.4. Three *kebet-karionks* used in setting a hearth (left) and two *kebet-sid'anonks* used as part of a hearth (right).

Maintenance of broken *kari* pots (*kebet-karionk* and *kebet-siďanonk*) and *kari* cups (*mätägoy)* is uncommon among the Majangir. Permeable or broken *kari* pots have other secondary uses at household level: storing cereals, chiefly corn and sorghum and other items while one can see most unusable *kari* pots in backyards, nearby residential huts. Leaky or broken *kari* pots can also be set as a hearth (*koytak*) or part of it within compounds or in cooking spaces in a residential hut.

The Majangir also use the base of broken *kebet-karionk* or *kebet-siďanonk* as a tray on which pepper (*mirmitak*) is processed or as a bowl (*lokoy*) to hold water during pottery production, whereas they make use of a *kari* cup (*mätäge*) with broken handle or rim to boil *mirmitak* required to spice their *kari*. Besides, potters use the basal part of a broken *mätäge* as a turning device (*lokoy*) on which they mold a new *mätäge.* A household can have a large number of *mätäge* and more than one *kebet-karionk* and *kebet-siďanonk* irrespective of its family size. In such cases*,* the latter can be used in boiling water other than their primary use in preparation of *kari*. Breakage of *kari* pots is ascribed to three major factors: frequent use in boiling *kari,* deterioration in the quality of pots resulting from the impact of thermal stress and collision. Breakage of *mätägoy* could occur because of collision and the action of children.

Notwithstanding the presence of diverse reasons that lead to breakage of pots, the degree of using pots for secondary purposes vary across households in the study areas. The stages in the life cycle of coffee related pots, summarized in figure 12.5, are non-directional. Each stage in the life cycle of a pot is important on its own and all the different levels are part of the complete life cycle of any of the coffee/*kari* pots. However, not every pot necessarily pass through each level until it is left as primary refuse at the site where it is used, or discarded as secondary refuse with disposals from households.

One can draw some points from this ethnoarchaeological study on use life of pottery related to coffee in southwest Ethiopia. In relative terms, the coffee roasting-griddle has a longer use life compared to coffee and *kari* pots. Compared to coffee and cooking pots, non-coffee pots, particularly larger pots (for example, water jars and beer pots) have longer use-life. This is attributed to the absence of thermal effect and shock in use and the lesser probability of breakage caused by the action of children.

The vessel types most frequently discarded are the *kari* pots of the Majangir followed by the bowl shaped coffee pots used by the Kafecho, the Majangir and the Oromo. All types of coffee related pots with a high

rate of discard are affected critically by thermal stress and cannot be reused for their original purposes if cracking occurs on their body. Still, coffee pots are the most frequently reused kind of pottery. While they cannot be used as pitchers any more, they have a variety of uses, such as storing corn grains, salt, or serving as incense burner etc.

Unlike other pottery related to coffee processing and consumption, coffee roasting-griddle has longer use-life, as it remains functional even after cracking due to thermal stress. On the other hand, the degree of continuance in primary function of coffee pots and *kari* pots largely depend on the part affected due to breakage while a secondary use of a pot varies across households depending on the economic status of a household to replace broken pots with new instantaneously.

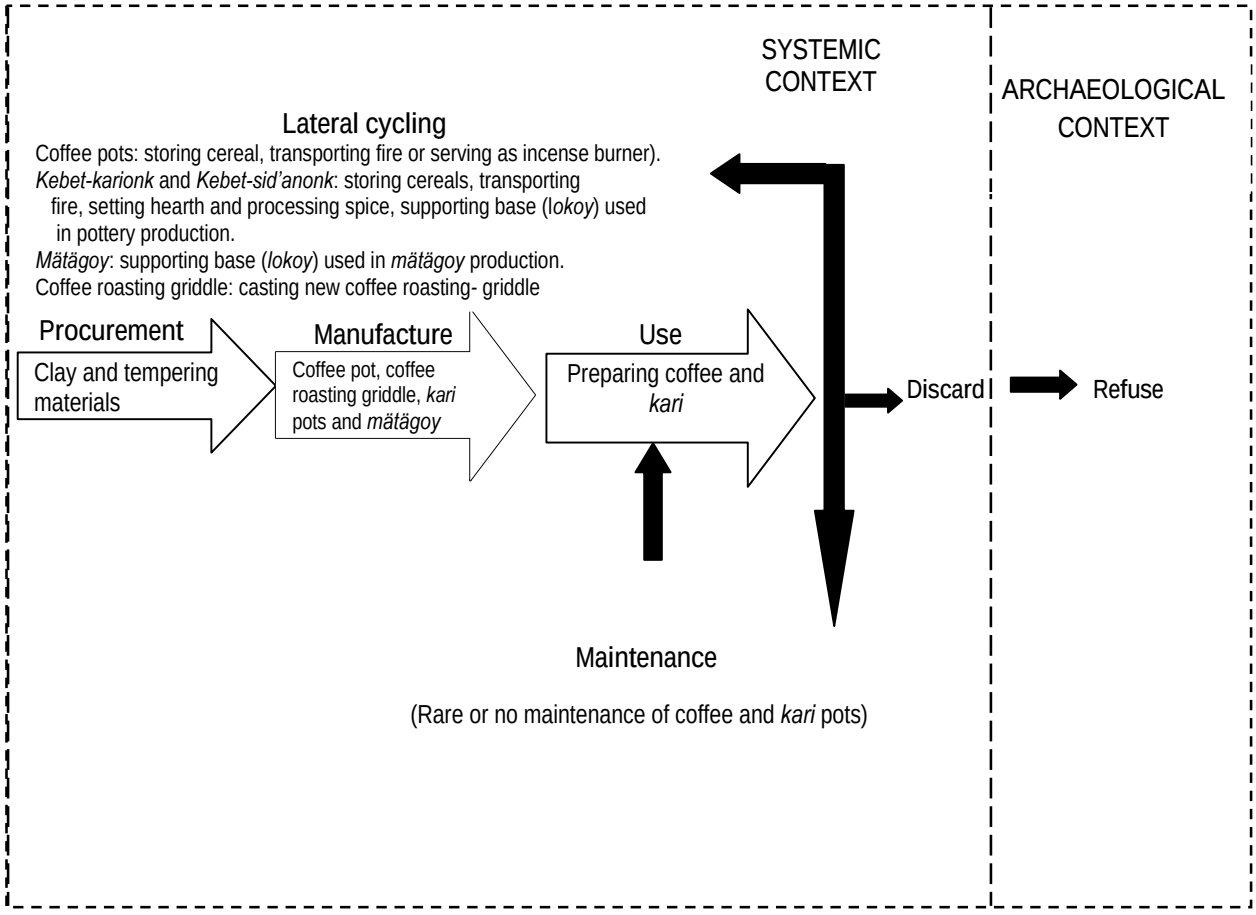


Figure 12.5. A simplified flow model for viewing the life cycle of coffee and *kari* pots

Note: The paths for the S-A processes are adapted from Schiffer (1972b:158; 1973:62).

	Pots	Cause of breakage				
		Production stage		Post-production stage		
		Over firing	Poor firing	Collision	Action of children	Thermal effect during use
Kafecho	Coffee pot(*bune-qondo)*					
	Coffee roasting-griddle(*bune-midado*)					
	Incense-burner(*shato*)					
Majangir	Coffee pot (*jäbänoy*)					
	Coffee roasting-griddle(*d'äyen-mu'eko*)					
	Kebet-karionk					
	Kebet-sid'anonk					
	Mätägoy					
Oromo	Coffee pot (*bune-qondo)*					
	Coffee roasting-griddle(*bune-midado*)					
	Incense burner(*girgirta*)					
	Hartu					
	Wacitii					

Table 12.1.C-transforms behind site formation processes of coffee-related pots.

The noticeable C-transforms that switch coffee-related pots from systemic context to archaeological context can boil down into two broad cultural factors: those that occur at production stage on one hand, and those that occur during postproduction stage on the other. Any pot could crack or breakdown because of over firing or poor firing at firing stage. The same is true of thermal effect during use of coffee related pots, particularly coffee pots and coffee roasting-griddle, which could easily crack during its primary use. Cracking of coffee pots necessitates the use new pots while cracked coffee roasting-griddle can go on serving its primary purpose. The impact of cultural factors that cause breakage and ultimate disposal in the postproduction stage, chiefly during the life cycle of pots should not be underrated as most of C-transforms occur at this stage.

	Pots	Use at Recycling stage					
		Transporting fire	Serving as incense burner	Storing cereals	To set a hearth	Processing spice to prepare *kari*	A turning device (basal supporting tool) in production
Kafecho	Coffee pot (*bune-qondo)*						
	Coffee roasting-griddle (*bune-midado*)						
Majangir	Coffee pot (*jäbänoy*)						
	Coffee roasting-griddle (*d'äyen-mu'eko*)						
	Kebet-karionk						
	Kebet-sid'anonk						
	Mätäge						
Oromo	Coffee pot (*bune-qondo)*						
	Coffee roasting-griddle (*ele-bicu*)						

Table 12.2.Recycling of coffee-related pots after breakage.

Expounding up on the flow model on the life cycle of pots, the above table summarizes the possible uses of coffee related pots after breakage. In this context, coffee pots are the most frequently recycled once they are no more used for the preparation of coffee. For instance, leaky coffee pots are used to store cereals while broken ones are used in transporting fire and as incense burners. *Kari* pots (*kebet-karionk* and *kebet-sid'anonk*) of the Majangir have multiple lateral functions. While they are no longer used in the preparation of the infusion due to cracking, they can be used for storing cereals mainly corn or to set a hearth. Up on breakage, however, the basal part can turn into a turning device (*lokoy*) on which similar pots are molded or

part of the sherds can be used to transport fire and to process spices required during the preparation of the drink. On the other end of the spectrum, cracked coffee roasting-griddles, even if continue serving their primary use, could otherwise be employed to cast new griddles among some Mänjo, Majang and Oromo potters. Broken griddles do not have other meaningful uses, and are thus discarded as refuse.

12.2. Midden Sites and Abandoned Houses

The chief concern in this part of the chapter is assessing the pattern of discarded potsherds from pottery related to coffee processing and consumption. This presentation, which is by no means an exhaustive treatment of the subject, charts out properties that fairly characterize cultural formation processes. In view of that, I provide the number and typology of coffee related potsherds collected from midden sites, abandoned houses and surface collections from southwest Ethiopia. From the outset, it should be clear that not all types of coffee pots occur in all sites while the only ethnographic data on ritual abandonment of such pots have been known from the Molle locality near Jiren, Jimma.

12.2.1. Midden Sites

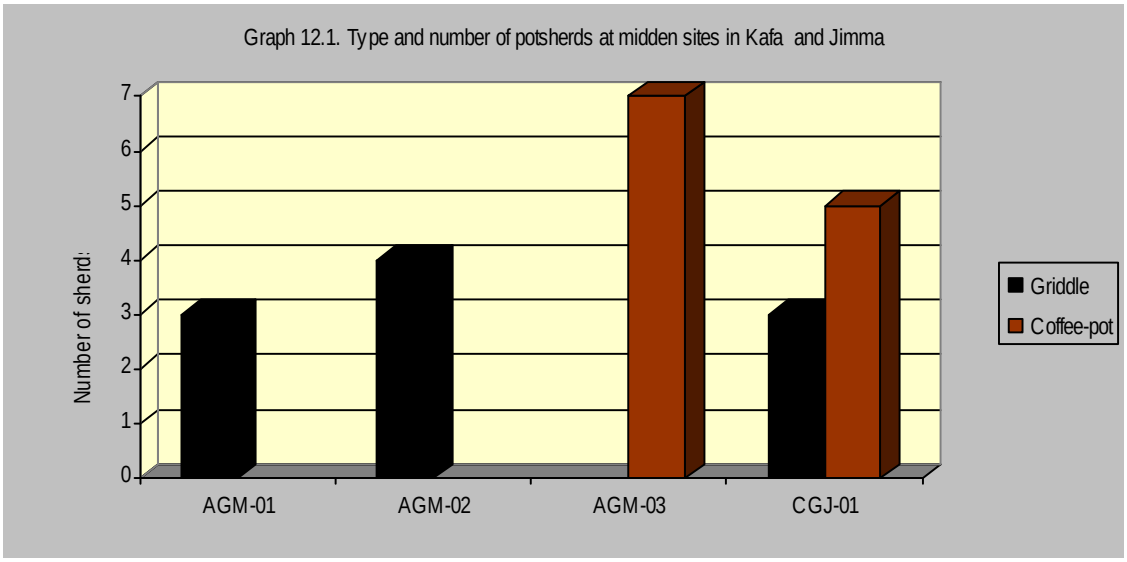
The chronology of artifacts recovered from archaeological sites varies from a few months (or even contemporaneous) to several millennia. There is a trend to discard some objects quickly (for example, bent nails, small ends of string or food remains) during excavation only because such things are largely considered as “rubbish” than finds. Consequently, there is an inclination to undervalue the most recent phases of occupation at archaeological sites systematically (Holtorf 2002:59). Concentration of cultural debris (midden) formed because of disposal from households is as interesting both from archaeological and ethnoarchaeological perspectives and chiefly in the study of site formation processes. In this context, this part of the chapter presents the pattern of discard as understood from examination of midden sites, abandoned settlements, and surface collections of scatters of potsherds occurring in residential areas and farms. The purpose in here is to assess the way pottery related to the preparation and consumption of coffee transforms from systemic to the archaeological context after passing through various stages in the life history elucidated in the succeeding paragraphs.

The present ethnoarchaeological study hints the absence of variation in terms the place where coffee-related pots and other pottery products are discarded up on breakage. Midden sites, investigated in Majang

inhabited settlements near Teppi, occur in the form mounds up to 1 meter high in backyards, nearby homegardens or close to farmlands. The content of these middens are chiefly disposals from households (for example, garbage, worn out plastics, cans, nail, pieces of cloth, potsherds from different kinds of pots, calabash etc.) and of course, windblown deposits, especially leaves fallen from trees. Aside from middens surface of occurrences of sherds from coffee related pots have been attested in the three study areas though the chief concern here is data from midden sites and abandoned houses in Majang inhabited villages, surface collections and evidence from abandoned settlements in Kafa and few surface collections documented at Coce-Lämi in Gomma, Jimma zone. The analysis of data relating potsherds from midden sites, surface and abandoned houses is synoptically represented by graphs indicating the number of sherds representing individual pots.

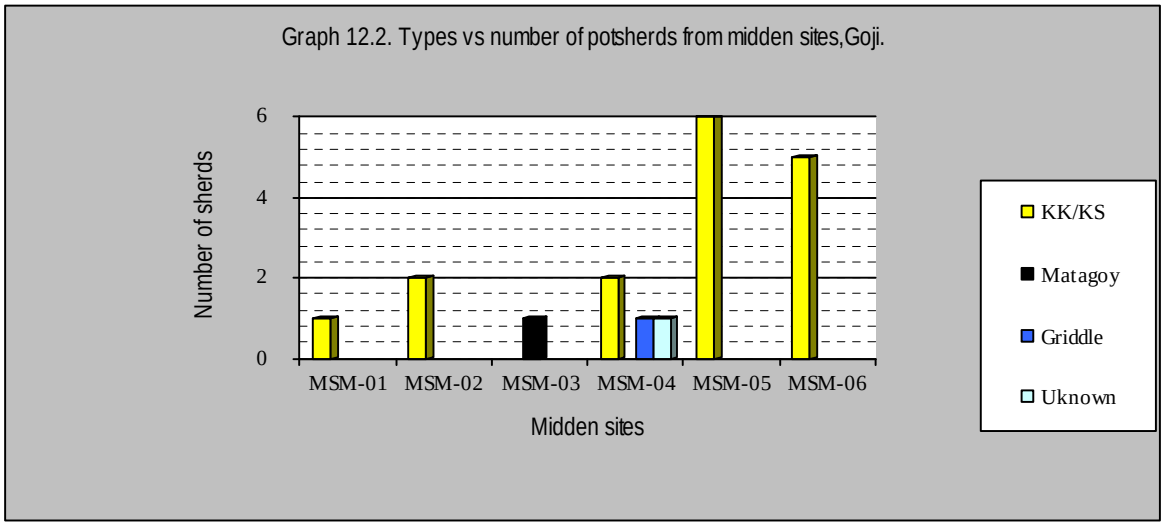
Many of the potsherds at the midden sites studied through this ethnoarchaeological research have been deposited via what Schiffer (1975) referred as "normal processes" of discard. Under these conditions, the sherds were committed to the archaeological record (midden) since they were either broken or worn out. It is perhaps possible that for some other reasons, the replacement of pottery products used in the processing and consumption of coffee and *kari* for a later time was easier than recovering and transporting them for use to another area particularly during site abandonment, as we shall see in the later part of this section.

Graph 12.1. Type and number of potsherds at midden sites in Kafa and Jimma



Six midden sites in villages inhabited by the Majangir in the Teppi vicinity have furnished evidence of discarded potsherds from households in the form of secondary refuse. The sites are located few meters at the rear of a living huts or close by bushes surrounding compounds. It appears in the form of a heap (pile of

debris) where one can find discarded potsherds with diagnostic features. These include sherds from coffee pots (*jäbänoy*), *kari* pots (*kebet-karionk and kebet-sid'anonk*), *mätäge,* coffee roasting-griddle (*d'äyen mu'eko*) and *sote* -a funnel-shaped calabash used in distilling *kari*. The zigzag incisions observed on the sherds collected from surface and midden sites exhibit decorative similarities with those used in systemic context. The implication is that coffee pots, mainly those used in the preparation of *kari* were disposed with other wastes upon breakage or after secondary use.

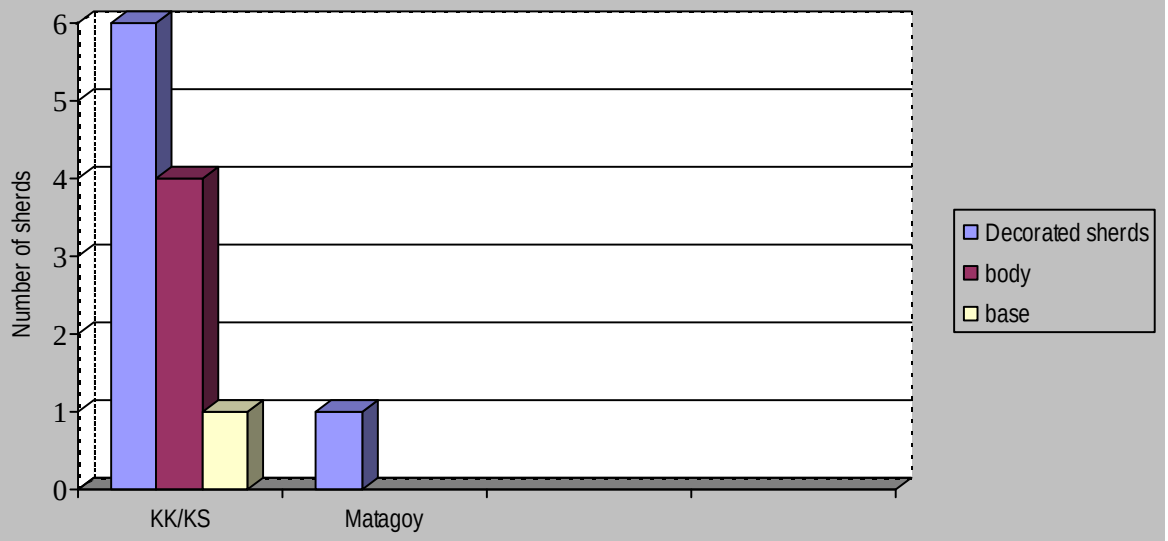


Surface collections of coffee related pots also suggest the prospect that sherds from coffee pots could be abandoned as primary refuse in the compound or agricultural fields where breakage occurs in use. Sherds from the surface and debris from residential huts comprised of decorated potsherds of different shape and size from *kebet-karionk* and *kebet-sid'anonk* along with food residues (spoiled corn and maize cobs), plastics and other utensils. A fragment of pot from one of the midden site yields information on secondary use of broken *kari* pots after breakage. The potsherd shows its use in smoking plastics and carrying fire to and from a hearth. The molten plastic covering part of the sherd indicates its use in smoking plastics to get-rid-off ants from living areas.

Zigzag incisions are the most common decorative motifs on potsherds from *kari* pots. The implication of the examination of midden sites is that broken pots are discarded with other household disposals and thus human agency is the key in the transformation of these objects from systemic to archaeological context. Not all worn out or broken pots are disposed at the same stage in their life history. The type of coffee-related pottery and the rate at which the pots are replaced at household level are factors that determine the

stage at which a broken pot is discarded. For example, the breakage of the coffee roasting-griddle in most instances involve no secondary use at household level and could thus be immediately discarded after breakage where as coffee and *kari* pots often pass through different stages in their life cycle.

Graph 12.3. Number of decorated sherds by type



12.2.2. Abandoned Houses

Abandonment of residential areas is another important factor resulting in traces of cultural debris in the study areas. This is particularly true in areas settled by the Majangir and the Kafecho where movement and construction of new houses at new sites have led to the abandonment of different refuse, including materials related to the production, processing and consumption of coffee. The factors that lead to abandonment of sites vary in time and space. In this context, Cameron (1993) points toward catastrophe, mass migration, and environmental crisis as prime causes of abandonment. Abandonment can occur at the level of activity area, structure, settlement or entire region. Understanding the abandonment stage is a significant step in order to interpret archaeological sites. In view of that, site abandonment in the study areas is attributable to varying factors. Among the Majangir, movement has been the norm with depletion of fertility of an agricultural land and such push factors as marriage, divorce, inheritance of land and other properties in Majang inhabited lands and of course quarrelling with individuals in the nearest homestead. Ethnographic observation has also shown that abandonment could occur due to the need to construct a new house within the same compound or a different spot, as it is the case among the Kafecho.

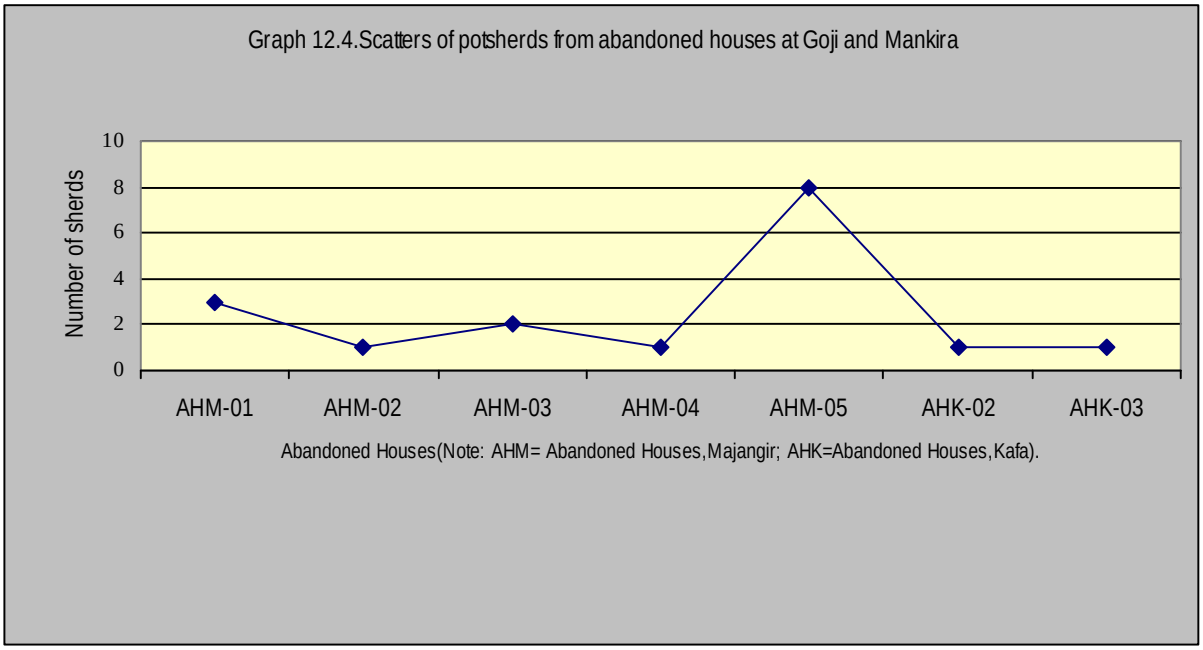
Archaeologists often presume that artifacts found on living surfaces directly represent their original context of use (Cameron 1993; Schiffer 1985). In view of that, the scatters of traces of materials discovered from abandoned houses in the study areas occur in and around living surfaces. This agrees with the idea put forth by Schiffer in the early 1970s that abandonment processes result from the normal processes involving discard or loss. Accordingly, abandonment processes become operative as activity areas are abandoned. Schiffer relates abandonment to the production of *de facto* refuse,[192] usable cultural materials (tools, facilities, structures, etc.) left behind once settlements or activity areas are abandoned (Schiffer 1972b; 1975; 1976; 1987). In view of that, the investigation has recorded traces of *de facto* refuse related to harvesting and consumption of coffee within deserted houses and their surroundings. The relative difficulty of transporting an item will determine its treatment during abandonment (Schiffer 1972b). Not all the remains from abandoned sites consisted of usable or unusable remains or materials used in processing and consumption of coffee but fundamentally potsherds from *kari* pots (*kebet-karionk*, *kebet-sid'anonk)* and coffee pitcher (*jäbänoy*) in abandoned sites once settled by the Majangir and potsherds from coffee roasting-griddle and a grinding stone in Kafa.

[192] De facto refuse has been defined as primary refuse or other objects, not necessarily discarded as such, that entered the archaeological record during the abandonment of an activity area (Schiffer 1972b).

Figure 12.6. A living floor of an abandoned house at Mankira, Kafa.

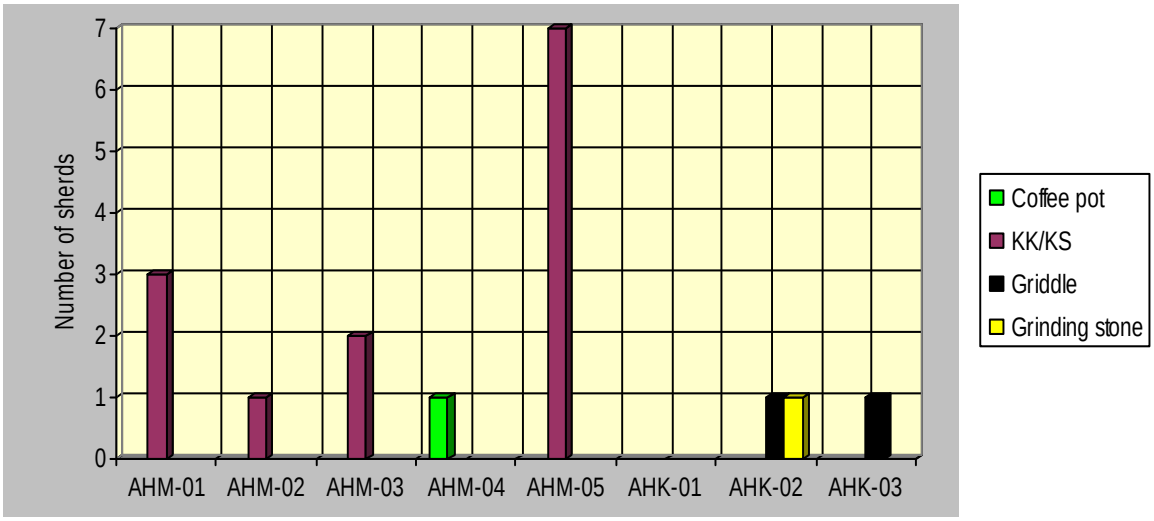
Figure 12.7. A basket (*kofo*) on the floor of the abandoned house at Mankira vicinity, Kafa.

In addition to potsherds recorded from midden sites and abandoned houses, scatters of potsherds are common in compounds, agricultural fields and in pottery manufacturing sites. The distribution of parts of coffee related pottery in different contexts is redolent of the various cultural reasons that lead to the formation of the archaeological record. This is particularly true of Kafa and Jimma where such occurrences are attested in residential compounds and agricultural fields. This is related to sedentarization and the continuous reuse of the same cultivated fields near the villages. The following graphs recap the number and type of sherds from abandoned houses and the variability in the size of these sherds.



The largest number of potsherds occurring in abandoned houses comes from villages inhabited by the Majangir. Most of the potsherds from these sites are part of *kari* pots as represented in the graph below. The occurrence of a single sherd of *jäbänoy* in one of the six abandoned houses (AHM-04) is insightful of the rarity of coffee pots in Majang households, where *kari*, unlike coffee, is regularly prepared in bowl-shaped pots (*kebet-karionk* and *kebet-sid'anonk*). The large number of sherds from *kari* pots can be considered as a manifestation of the importance of *kari* in the coffee consumption tradition of the Majangir.

Graph 12.5. Frequency of potsherds and other artifacts from abandoned houses at Goji and Mankira.



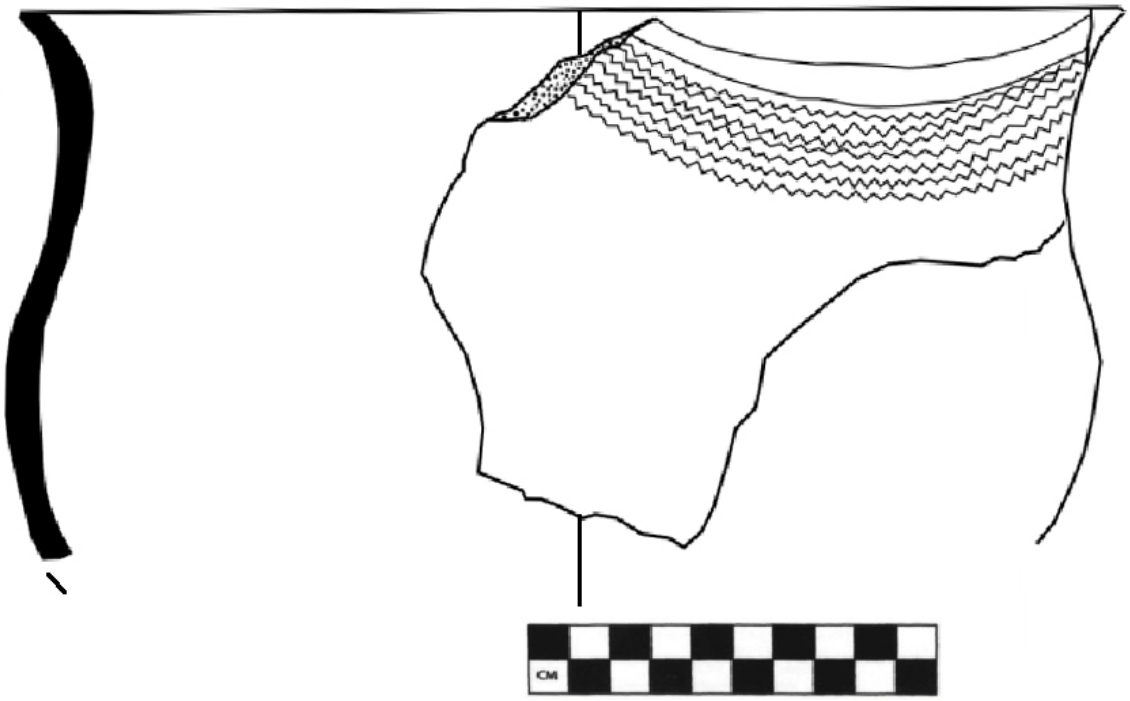


Figure 12.8. A sherd from *Kebet-karionk.*

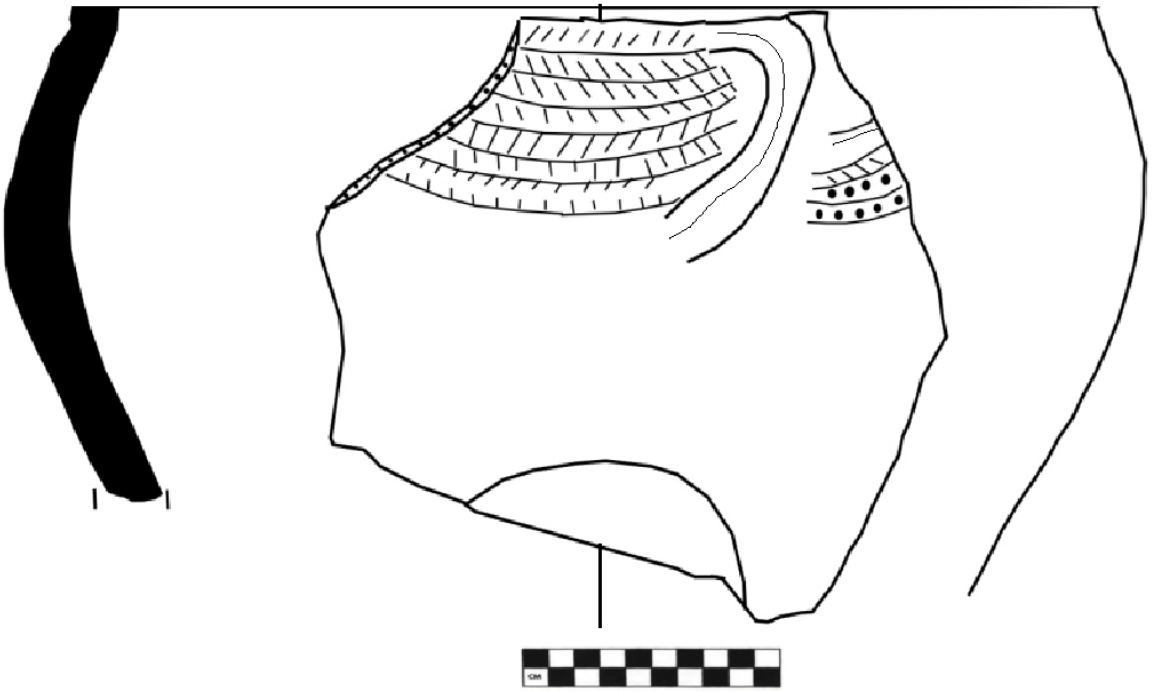


Figure 12.9. A sherd from *mätäge*.

Zigzag-incised sherds from the rim of *kebet-karionk,* globular pots used in the boiling of *kari*, are analogous with the roulette-decorated sherds from the sites of Ajilak in Gambela dated to 1000-1200 AD (see Figure 15, González -Ruibal *et al.* 2014:86). The roulette techniques, particularly twisted cord and spaced-knot roulettes, are still known among the Nilotes (the Majangir) and the Koman (Bertha and Gwama) peoples of the escarpment. Based on archaeological and ethnographic data, the sites of Ajilak are correlated with the Majangir, Sabu and less likely with the Koman peoples (*ibid.).* Wavy-like incision on present day globular *kari* pots is plausibly part of the continuing tradition of the roulette techniques predominant on potsherds from the sites of Ajilak.

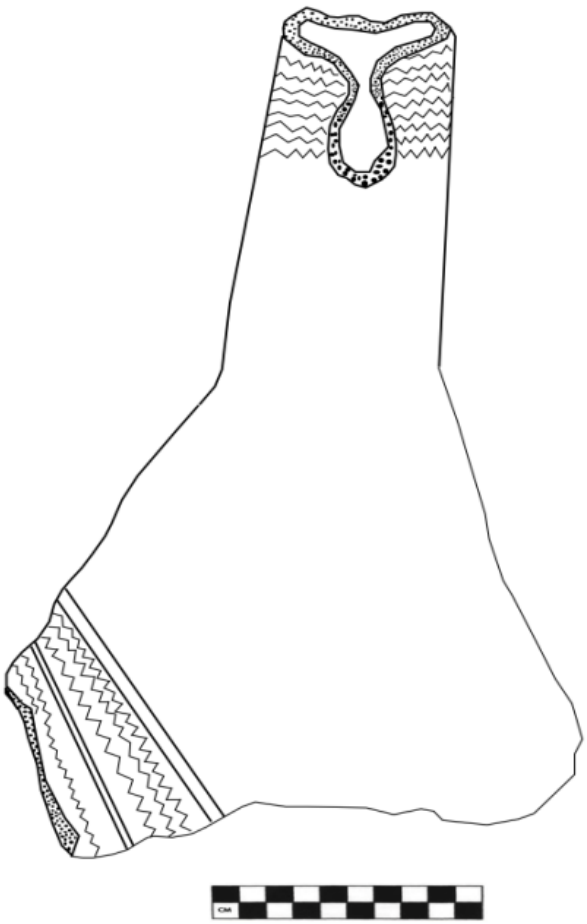
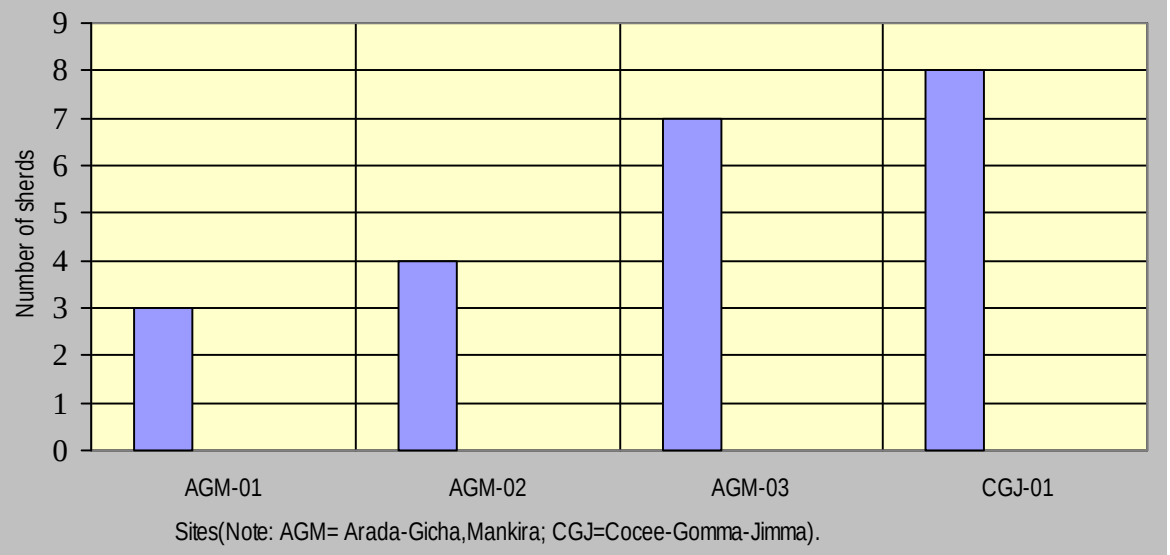


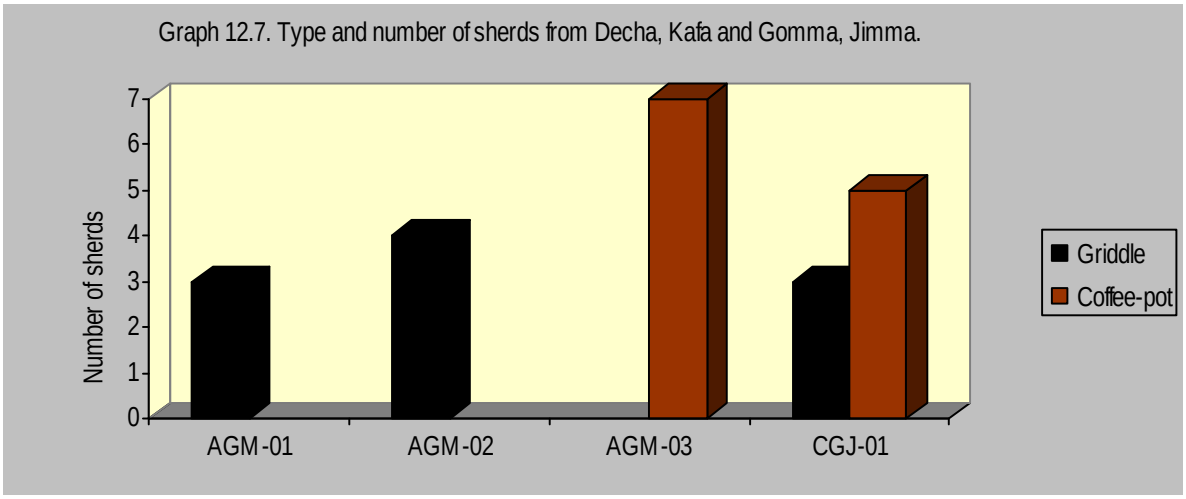
Figure 12.10. A sherd representing part of a coffee pot (*jäbänoy*) from an abandoned house at Goji, Teppi environs.

Sherds of coffee-related pots chiefly of coffee pots and coffee roasting-griddle occur relatively in large number in Mankira and Coce localities in Kafa and Jimma correspondingly. Sherds from coffee pots do not have decorative motifs but represent the neck, the body and handle of the pot.

Surface collections of potsherds related to the preparation and consumption of coffee have also been recovered from ritual sites at Molle locality near Jiren in Jimma where the Oromized Yäma of the area prepare coffee under a sycamore tree in supplication for good harvest and health of the people. This is particularly true during harvesting season where coffee is roasted using coffee roasting-griddle (*ele-bicu)* and incense is burnt on an incense burner (*girgirta*). Since ritual abandonment of coffee-related materials at the ritual site has been attested in ethnographic context, the likelihood of finding similar archaeological remains as a ritual cache is a possibility. An ethnoarchaeological model that can be formulated based on the above postulation is that "the apperance of isolated materials related to social consumption (coffee, beer or food) outside inhabited areas can be associated with ritual activities, such as rites of the agricultural cycle or fertility rituals."

Graph 12.6. Surface occurrence of potsherds from Decha, Kafa and Gomma, Jimma.





Some of the sherds recovered from a ritual site at Molle exemplify primary refuse and are evident of how the ritual abandonment of objects leads to archaeological site formation. The depositional context of potsherds from coffee pots in southwest Ethiopia signify that archaeological assemblages involving coffee pots are the result of an evolutionary sequence with three behavioral stages: pre-abandonment (production and use stage), abandonment and post abandonment. Each stage has a different set of depositional modes. This model provides a framework for interpreting behaviors such as provisional discard and abandonment in archaeological context.

Figure 12.11. Surface collections of potsherds from coffee roasting-griddles (*ele-bicu*) from Molle, Jiren locality, Jimma.

Inferring from the number of sherds representing a pot in a layer of debris at midden sites, abandoned houses and surface collections, there is a conspicuous variation in the intensity of breakage of coffee and *kari*-pots. The degree of fragmentation presented in the next table is calculated using the formula FI= 1/ 1 + $\log_{10}$(P).[193] If the fragmentation index (FI) ranges in value from 1.0, an artifact [a pot in this context] represented by a piece, to numbers approaching 0.0, which show intense fragmentation (see Schiffer 1983:686).

Table 12.3. Fragmentation index of pottery related to coffee processing and consumption.

Midden sites	Types of sherds	Number of sherds	FI (Fragmentation Index) $FI = \frac{1}{1+\log_{10}(p)}$
MSM-01	*kk/ks*	1	1
MSM-02	*kk/ks*	2	0.768
MSM-03	*Mätägoy*	1	1
MSM-04	*kk/ks*	2	0.768
	Griddle	1	1
MSM-05	*kk/ks*	6	0.562
MSM-06	*kk/ks*	5	0.588
Abandoned houses			
AHM-01	*kk/ks*	3	0.209
AHM-02	*kk/ks*	1	1
AHM-03	*kk/ks*	2	0.768
AHM-04	Coffee pot	1	1
AHM-05	*kk/ks*	5	0.588
AHK-01	-	-	-
AHK-02	Griddle	1	1

[193] "P" stands for the number of sherds

AHK-03	Griddle	1	1
Surface collection			
AGM-01	Griddle	3	0.209
AGM-02	Griddle	4	0.624
AGM-03	Coffee pot	7	0.542
CGJ-01	Griddle	3	0.209
	Coffee pot	5	0.588

As one can see from table 12.3, there is variation in terms of fragmentation index of pottery related to coffee processing and consumption. In view of that, the greatest fragmentation index comes from surface collection and the least fragmentation from houses, with middens in between both. There is also a conspicuous difference between the different groups. Accordingly, most of the sherds come from midden sites and abandoned houses in Majang inhabited areas, followed by Kafecho, and Oromo inhabited settlements. This greater proportion of sherds from Majang settlements could partly be attributed to the diversity of pots used in the preparation and consumption of *kari* and coffee.

12.3. Experiment on Carbonization and Preservation of Coffee

Several scholars (for instance, Boardman and Jones 1990; Gustafsson 2000; Sievers and Wadley 2008; Tutusaus 2012; Wilson 1984) indicate that the application of experimental studies on seeds/ grains of plants have been a tradition in archaeobotany. If carbonization has been the target of several studies, the central question to be raised here is why need to experiment on parts of *Coffea arabica*? This is owing to the fact that any instance of heating in the past tends to leave three categories of evidence: carbonized, un-carbonized and destroyed remains because of burning (See Wilson 1984). It also has to do with the dearth of archaeological data on coffee, and the need to scrutinize the changes that could occur to the different parts of the plant. Accordingly, the charring experiment on three parts of the plant (the leaf, the bean and the stem) has furnished useful insights on the possibility of preservation of archaeological signatures from the plant in the form of carbonized remains.

Most experimental studies on the effects of charring on seeds and fruits point towards the resultant morphological and chemical alterations, or the chances of preservation. Other taphonomic agents such as erosion, transportation by wind, soil PH, trampling or bioturbation are also important aspects to take into account while conducting such experiments (Tutusaus 2012). In view of that, the experiments on coffee pays a great deal of attention to the resulting morphological changes due to charring and the extent to which soil PH and weather conditions affect preservation of coffee beans after deposition.

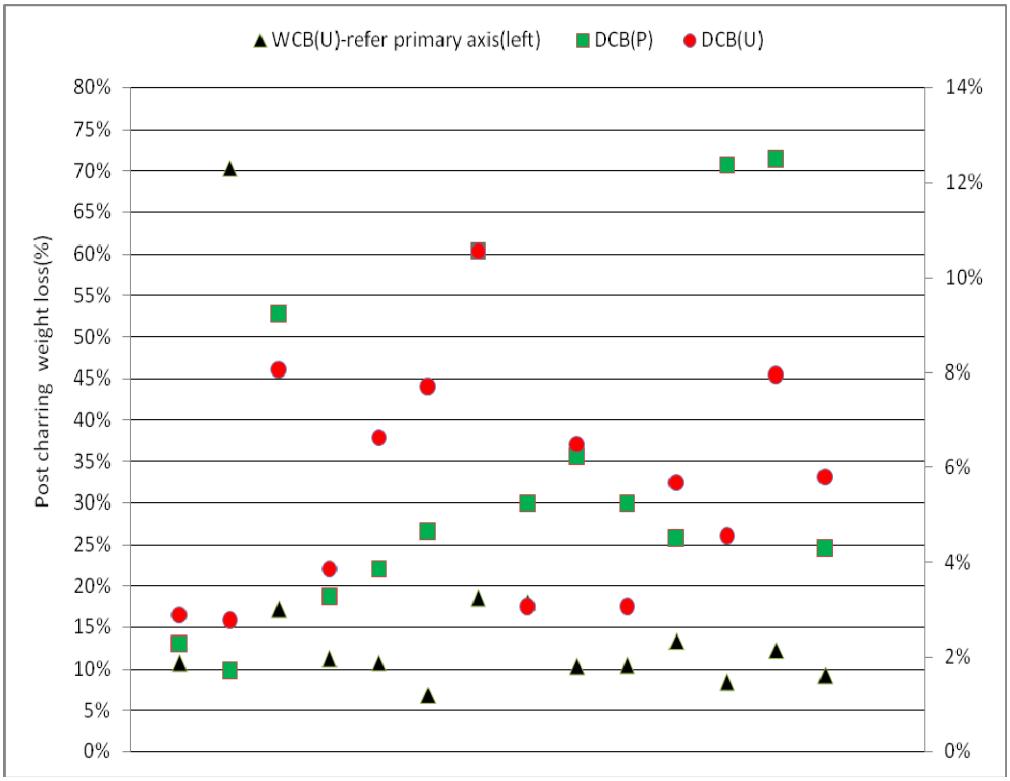
12.3.1. Charring Parts of Coffee Plant and Understanding the Process of Carbonization

The process of carbonization is considered as complex as time and temperature required to carbonize seeds and fruits vary depending on the amount of oxygen during charring and the moisture content of the part of the plant being charred (Tutusaus 2012). Conducting experiment in laboratory and field was a time consuming activity although the results have provided relevant data on the state of the properties of the beans after a series of experiments.

The measure of carbon and nitrogen isotope ratios in ancient crop remains preserved by charring helps to understand how crops were grown in the past. Although the process of charring preserves the physical form of seeds, it results in a slight variation to the carbon and nitrogen isotope ratio (Nitsch *et al.* 2015). My study demonstrates the resulting physical changes within a window of charring temperatures and time. At higher temperatures, coffee beans, leaves and stalks were entirely converted into ash, and where this process was gentle enough, the physical form of the beans was distorted.

The charring experiment on parts of coffee was conducted under controlled conditions (temperature vs. time) using a furnace at the laboratory of the Department of Biology, University of Santiago de Compostela. In order to have a better picture of the composition of coffee bean assemblages, it was essential to have a complete description of the composition of the assemblage the early stage of the experiment for the purpose of stating the results of every taphonomic agent on the assemblage. The stalks used in the charring experiment come from the lateral branch bearing coffee beans. All parts of the plant used during the experiment were characterized and weighed. For the noticeable variation in the weight of coffee beans after charring, refer tables 12.4 and 12.5.

The charring experiment was conducted between 120 ^{0}C and 500 ^{0}C with an interlude of 30 minutes for inspection. The unprocessed dry coffee beans –DCB (U)- were light dark in color and had pulp, and a little number of cherries partly posses partly removed pulps. The leaves were semi-dry and light dark in color while the unprocessed wet coffee beans -WCB (U) - were dark brown in color, completely wet and covered with pulp. The processed dry coffee beans -DCB (P) - were olive green in color and the wood (stalk) was semi-dry. Samples from the beans, the leaves and the stalks were carbonized under different temperatures in aerobic and anaerobic conditions. In all cases, there is an increasing drop in the moisture content of the parts of coffee after charring. For details on the weight loss of the samples, see tables 12.4 and 12.5.



Graph 12.8. Summary of % weight loss for three types of coffee beans charred at 10 different temperatures and times, for 45 minutes -2:30 hrs at 120 ^{o}C-500 ^{o}C.

Charring Under Aerobic Conditions (120 ^{o}C-300 ^{o}C)

Charring at lower temperatures (120 ^{o}C , 150 ^{o}C and 180 ^{o}C) basically plumetted moisture content of the beans, particularly of wet coffee beans.The noticeable changes under these temperature ranges were drying and shrinking of wet coffee beans. Dry coffee beans got drier and started to carbonize at 200 ^{o}C.

Table 12.4. Variability in the weight of coffee beans before and after charring under aerobic condition (120-300 ^{0}C).

Code	Weight of the crucible	Type of beans	Weight before charring (WBC in gm)	Temp.(^{o}C)	Time	Weight after charring WAC(gm)	Weight loss after charring(gm)
10	19.3601	DCB(P)	25.787	120	1hr.	25.196	0.591
23	20.34297	WCB(U)	26.472	120	1hr.	23.635	2.837
4	17.35306	DCB(U)	21.623	120	1hr.	20.998	0.625
2	20.07546	DCB(P)	25.063	150	1:45 hrs.	24.634	0.429
12	19.26322	DCB(U)	23.044	150	1:45 hrs.	22.410	0.634
21	19.23148	WCB(U)	26.568	150	1:45 hrs.	21.950	4.618
27	21.35922	DCB(P)	26.982	180	2:00 hrs.	24.492	2.49
14	17.62935	DCB(U)	21.613	180	2:00 hrs.	19.869	1.744
24	19,57405	WCB(U)	25.055	180	2:00 hrs.	20.774	4.281
X73	22.21872	DCB(P)	27.0560	200	1:00 hrs.	26.167	0.889
X63	24.14297	DCB(U)	26.158	200	1:00 hrs.	25.146	1.012
X69	23.9269	WCB(U)	29.074	200	1:00 hrs.	25.812	3.262
28	23.61168	DCB(P)	28.140	250	1:45 hrs.	26.785	1.355
X60	24.32415	DCB(U)	29.181	250	1:45 hrs.	27.246	1.935
N15	30.9768	WCB(U)	36.409	250	1:45 hrs.	32.478	3.931
N4	30.01096	DCB(P)	32.749	300	2:30 hrs.	31.231	1.518
18	19.53381	DCB(U)	22.040	300	2:30 hrs.	20.343	1.697
16	21.48008	WCB(U)	24.950	300	2:30 hrs.	22.412	2.538

Signs of carbonization under aerobic conditions occurred after two hours of charring at 180 ^{o}C. At this temperature, the leaves were entirely carbonized, tapered and with ash content. The DCB (U) got drier and the pulp was carbonized with no oily surface and easily shattering from the beans as the stalks began to carbonize. Likewise, at the end of charring at 200 ^{o}C, coffee leaves showed signs of carbonization producing little ash while the stalks were fully carbonized turning brown in color. Changes in the morphology of parts of coffee was rather amplified at higher temperatures(250 ^{o}C and 300 ^{o}C). For example, at the end of charring at 250 ^{o}C, DCB(P) were fully charred, the pulp starting to shatter off the cracking DCB(U) while WCB(U) began shrinking.

The major changes at this stage included carbonization of the stalk and the leaves, which turned dark-brown and produced ash upon pressing. These changes progressed for most of the experiment at 300 ^{o}C when complete carbonization of the samples was noticed after charring for two hours. Consequently, the leaves were carbonized leaving brown discoloration on the crucible changing to ash when squeezed. At this temperature, the stalks showed a slight color change from olive green to shiny dark brown. The DCB (P) were fused into dark brown solid lump whereas charred DCB (U) and WCB (U) were partly cracked, the latter exhibiting tapered pulp and leaving dark discoloration on the crucible.

Charring Under Aerobic and Anaerobic Conditions (350 ^{o}C to 500 ^{o}C)

Charring at higher temperatures (350 ^{o}C to 500 ^{o}C) under both aerobic and anaerobic conditions shows various degree of carbonization on coffee beans while the leaf and the stalk partly turned to ash. At 350 ^{o}C, further morphological changes were noticed on parts of the coffee plant. Both DCB (P) and DCB (U) were completely charred and the pulps of WCB (U) shrunk. The leaves and the stalks were completely carbonized, the former producing black powder when pressed and the latter partly changing to ash. The result of charring at the same temperature under anaerobic condition was very much alike with the changes under aerobic conditions. All types of beans were charred with cracking DCB (P), sticking DCB (U) and pierced WCB (U). At the end of the charring, the stalks were carbonized resulting in dark shiny surface and fragments of leaves.

A high degree of physical transformation on parts of coffee was noticed while charring at 400 ^{o}C, 450 ^{o}C and 500 ^{o}C. At 400 ^{o}C, the leaves and the stalks were transformed into ash. At this temperature, all the beans were carbonized. Physical changes noticed include the transformation of DCB (P) into solid lump

with traces of ash, cracking of ashy charred DCB (U). Under anaerobic conditions, carbonized WCB (U) changed to dark powder when squashed, while grains of coffee occurred in a solid lump 17 mm thick. Most of the DCB (P), the leaves and the stalks turned into ash with some of the beans from the DCB (P) were occurring in solid lump about 8 mm thick and the pulps of the DCB (U) were opening up.

Charring coffee beans at 450 ^{o}C under both aerobic and anaerobic conditions shows variation in morphological changes resulting. Under aerobic conditions, charred DCB (U) were partly changed into ash leaving dark brown discoloration on the crucibles. In charred WCB (U), the beans split with the pulp turning to ashes on burnt parts and DCB (P), leaves and stalks turned to ash. Most of the changes under anaerobic conditions (450 ^{o}C) were complete carbonization and distortions in the physical form of the beans. Charred DCB (P) exhibit partly destroyed dark-white ashy surface on the beans occurring in chunks. While charred DCB (U) were turning light dark in color, carbonized WCB (U) were broken. The stalks were fairly preserved though partly turning to ash while the leaves are completely carbonized leaving dark-brown discolorations on the crucible. Under aerobic conditions charring at 500 ^{o}C all types of beans used during the experiment were carbonized leaving traces of ash as the leaves and the stalks were utterly turning into ash. Under anaerobic conditions, all parts of the plant were carbonized with varying degree of preservation. The leaves and the stalks were all carbonized represented by fragmentary remains. For the variability in the preservation of the different parts of coffee, refer graphs 12.9-12.14).

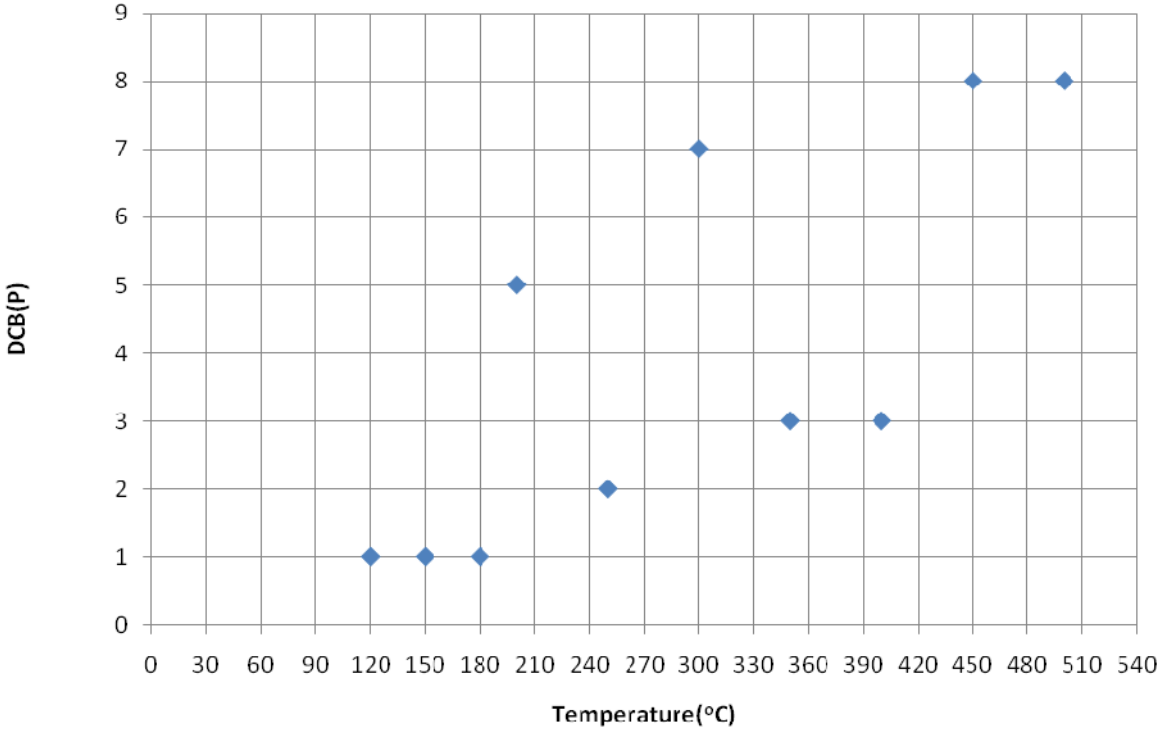
Table 12.5. Weight loss of coffee beans charred under both aerobic and anaerobic conditions (300-500 ^{0}C).

Code	Weight of the Crucible	Type of beans	WBC(gm)	Temp.(^{o}C) Anaerobic	Time	WAC(gm)	Weight loss after charring
16	21.548008	DCB(P)	26.040	350	2:00 hrs.	23.287	2.753
11	23.93041	DCB(U)	28.411	350	2:00 hrs.	25.409	3.002
17	22.54798	WCB(U)	28.675	350	2:00 hrs.	23.373	5.302
Code	Weight of the Crucible	Type of beans	WBC(gm)	Temp.(^{o}C) Aerobic	Time	WAC(gm)	Weight loss after charring
5	20.28484	DCB(P)	25.392	350	2:00 hrs.	22.145	3.247
13	18.93432	DCB(U)	22.285	350	2:00 hrs.	20.029	2.256
6	19.26235	WCB(U)	24.501	350	2:00 hrs.	20.089	4.412
Code	Weight of the Crucible	Type of beans	WBC(gm)	Temp.(^{o}C) Anaerobic	Time	WAC(gm)	Weight loss after charring
2	20.07546	DCB(P)	21.390	400	2:00 hrs.	20.268	1.122
N13	28.51263	DCB(U)	29.761	400	2:00 hrs.	28.854	0.907
X73	22.21872	WCB(U)	25.134	400	2:00 hrs.	22.521	2.613
Code	Weight of the Crucible	Type of beans	WBC(gm)	Temp.(^{o}C) Aerobic	Time	WAC(gm)	Weight loss after charring
N9	28.69544	DCB(P)	30.913	400	2:00 hrs.	28.992	1.921
N8	28.58695	DCB(U)	30.774	400	2:00 hrs.	28.777	1.997
N10	30.82616	WCB(U)	34.664	400	2:00 hrs.	31.105	3.559
Code	Weight of the Crucible	Type of beans	WBC(gm)	Temp.(^{o}C) Anaerobic	Time	WAC(gm)	Weight loss after charring
12	19.26322	DCB(P)	22.741	450	1:00 hr.	19.925	2.816
N14	30.7297	DCB(U)	32.610	450	1:00hr	31.130	1.48
22	22.302007	WCB(U)	24.609	450	1:00 h.r	22.544	2.065
Code	Weight of the Crucible	Type of beans	WBC(gm)	Temp.(^{o}C) Aerobic	Time	WAC(gm)	Weight loss after charring
N1	29.34157	DCB(P)	30.929	450	1:00 hr.	29.540	1.389
11	23.93041	DCB(U)	25.445	450	1:00 hr.	24.001	1.444
10	19.3601	WCB(U)	22.604	450	1:00 hr.	19.586	3.018

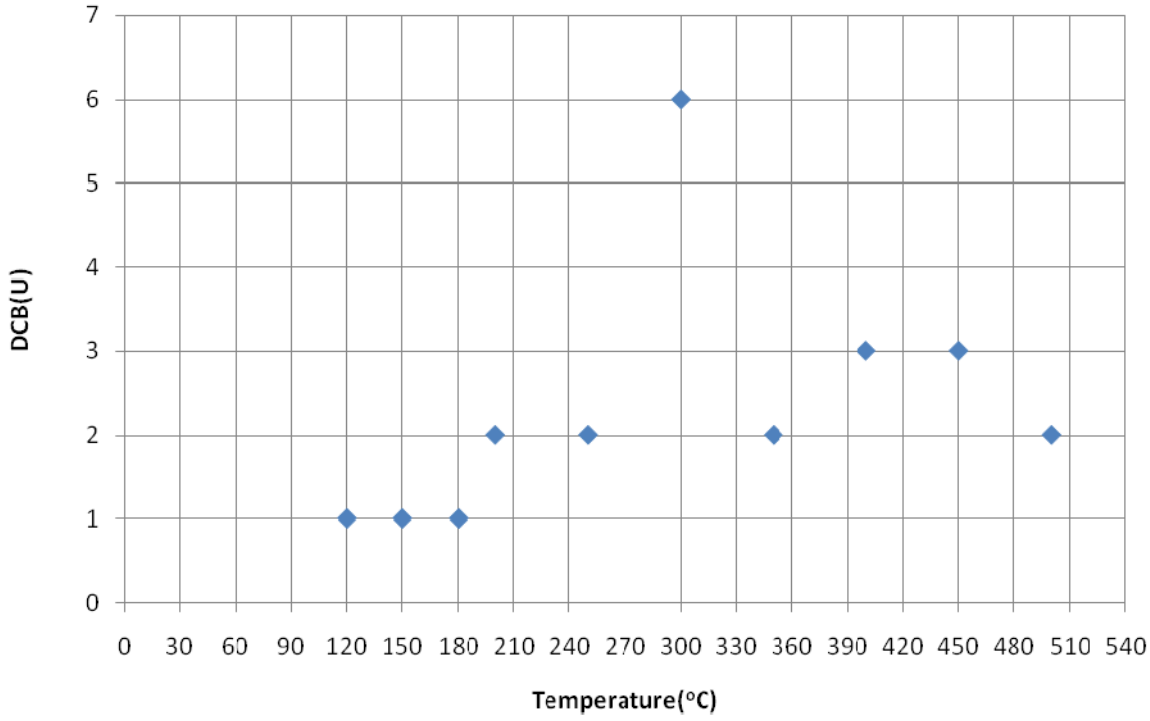
Code	Weight of the Crucible	Type of beans	WBC(gm)	Temp.(°C) Anaerobic	Time	WAC(gm)	Weight loss after charring
X77	21.68408	DCB(P)	23.330	500	45 min.	21.737	1.593
26	19.53441	DCB(U)	21.078	500	45 min.	19.856	1.222
13	18.93432	WCB	21.047	500	45 min.	19.118	1.929
Code	Weight of the Crucible	Type of beans	WBC(gm)	Temp.(°C) Aerobic	Time	WAC(gm)	Weight loss after charring
14	17.62935	DCB(P)	20.466	500	45 min.	17.909	2.557
25	19.53732	DCB(U)	21.352	500	45 min.	19.659	1.693
8	21.54283	WCB	24.797	500	45 min.	21.758	3.039

Table 12.6. Numerical codes used for recording preservation of coffee parts.

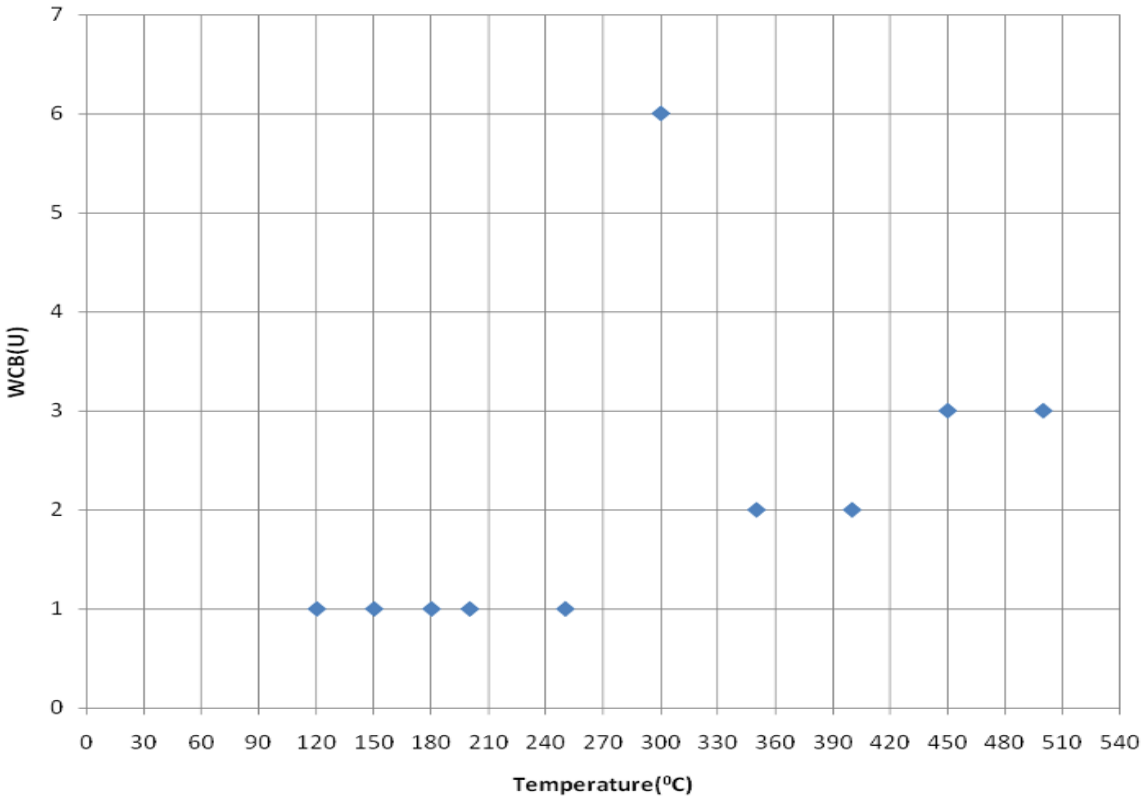
Code no.	Preservation
1	Perfect pulp, epidermis virtually preserved/drying
2	Charred epidermis, incomplete pulp/cracking
3	Carbonized fragments and ash
4	Heavily pitted/clinkered
5	Fully carbonized
6	Partially destroyed(cracking+ ash)
7	Fused into solid lump
8	Ash
9	Fused into lump and ash



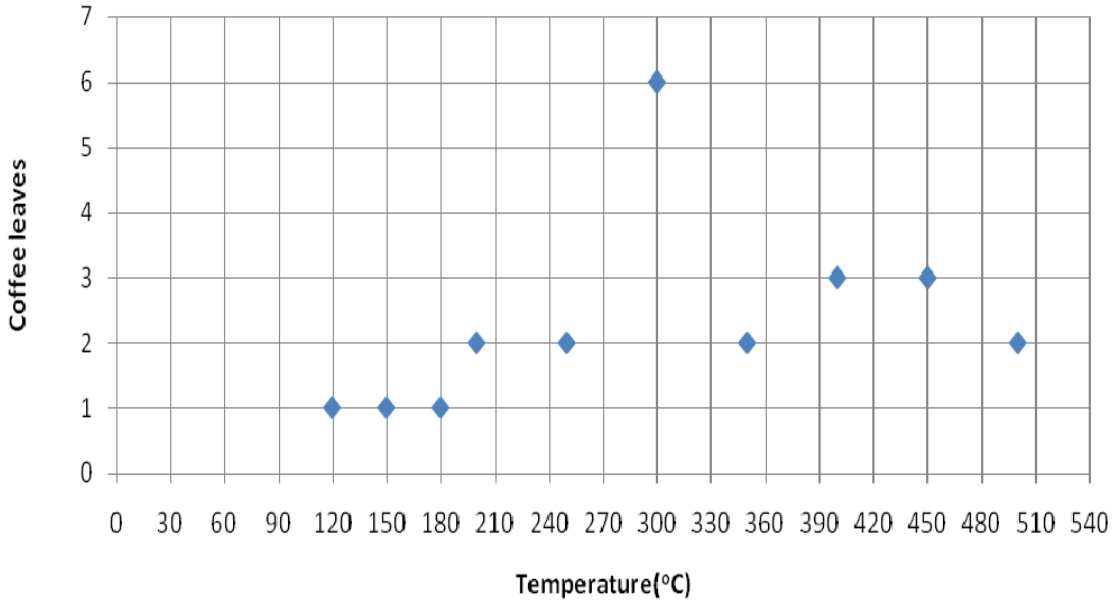
Graph 12.9. Preservation of DCB (P) after charring under aerobic conditions (120-500 °C).



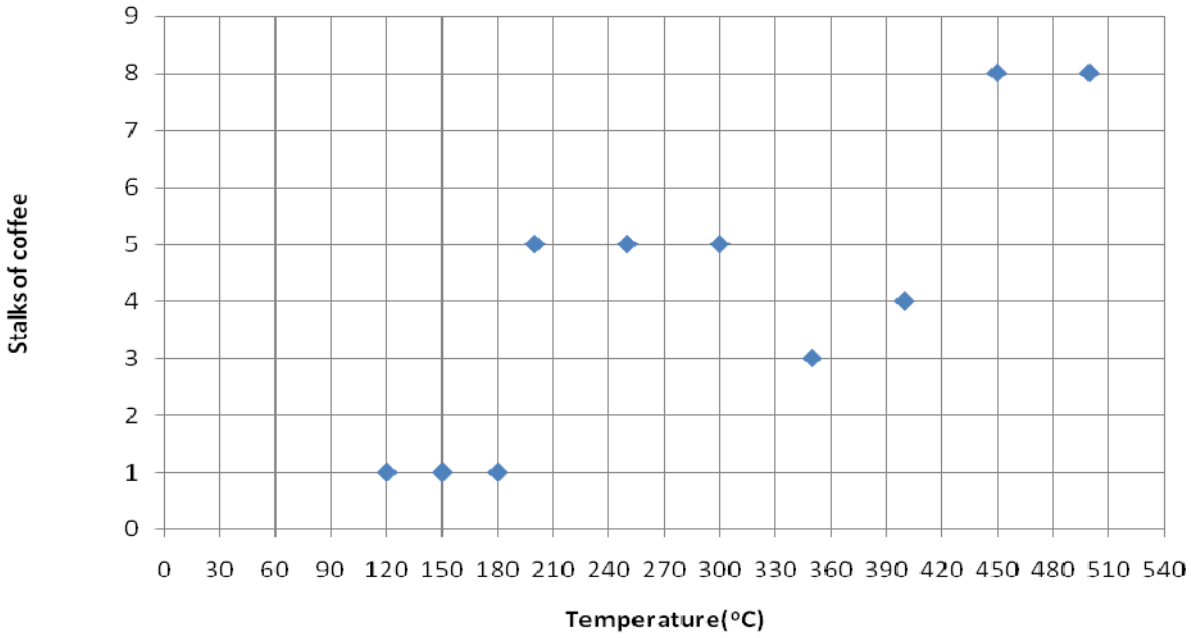
Graph 12.10. Preservation of DCB (U) after charring under aerobic conditions (120-500 °C).



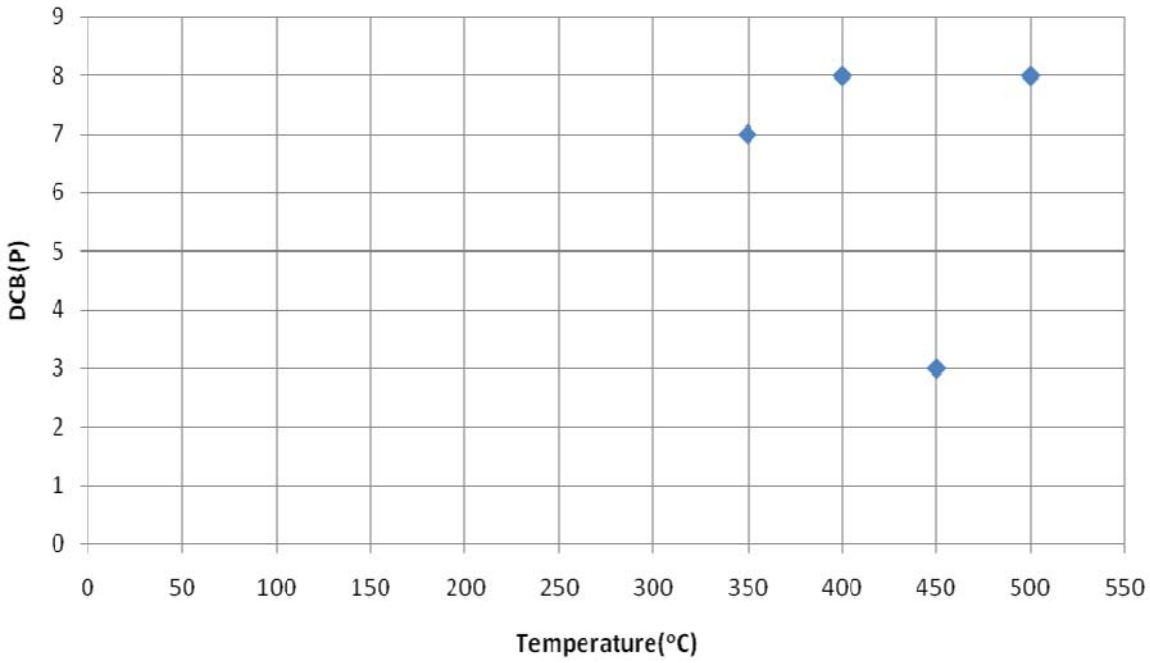
Graph 12.11. Preservation of WCB (U) after charring under aerobic conditions (120-500 °C).



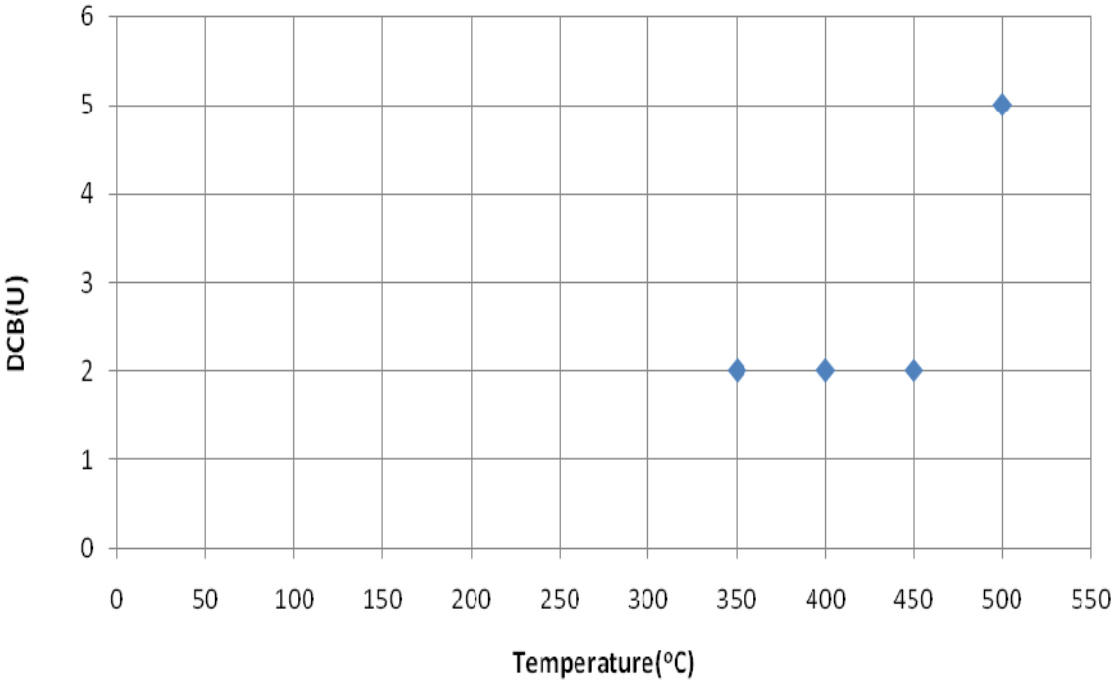
Graph 12.12. Preservation of coffee leaves after charring under aerobic conditions (120-500 °C).



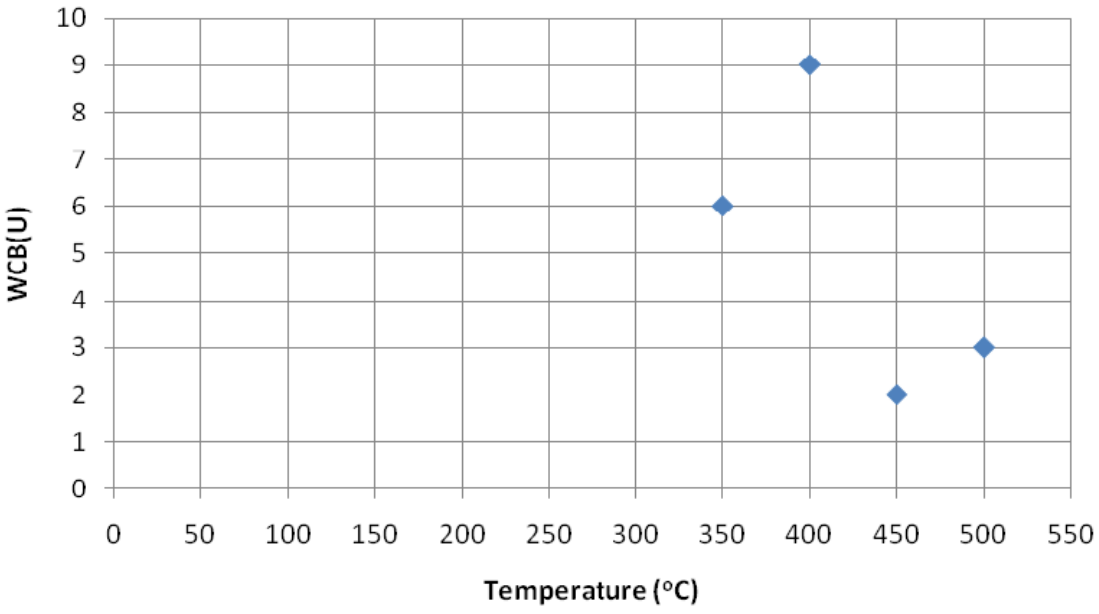
Graph 12.13. Preservation of stalks of coffee after charring under aerobic conditions (120-500 ^{0}C).



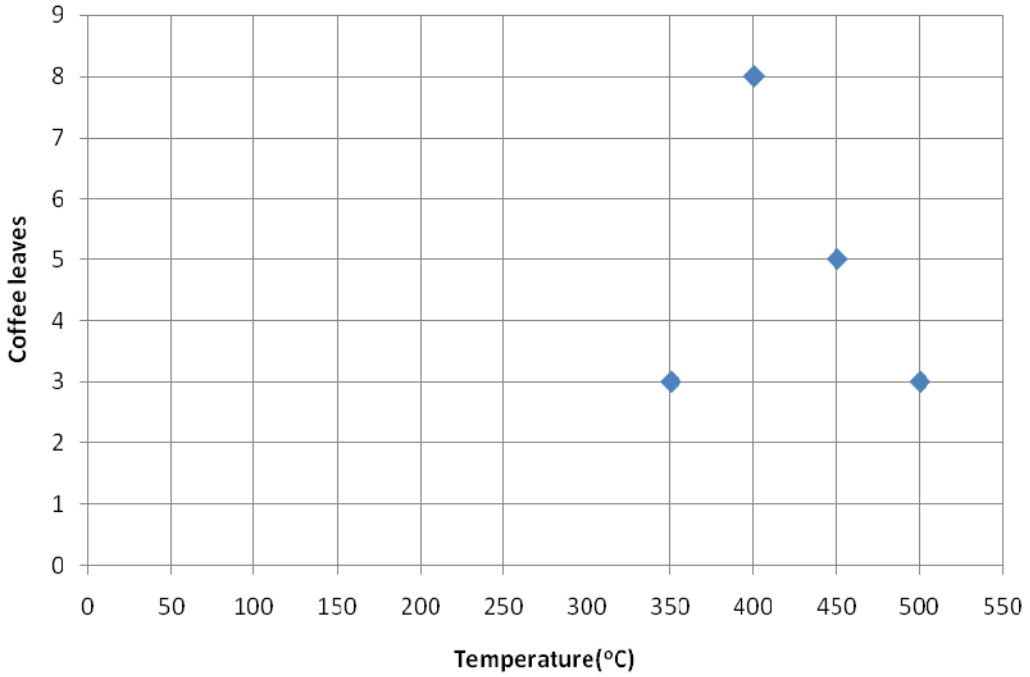
Graph 12.14. Preservation of DCB (P) after charring under anaerobic condition (350-500 ^{o}C).



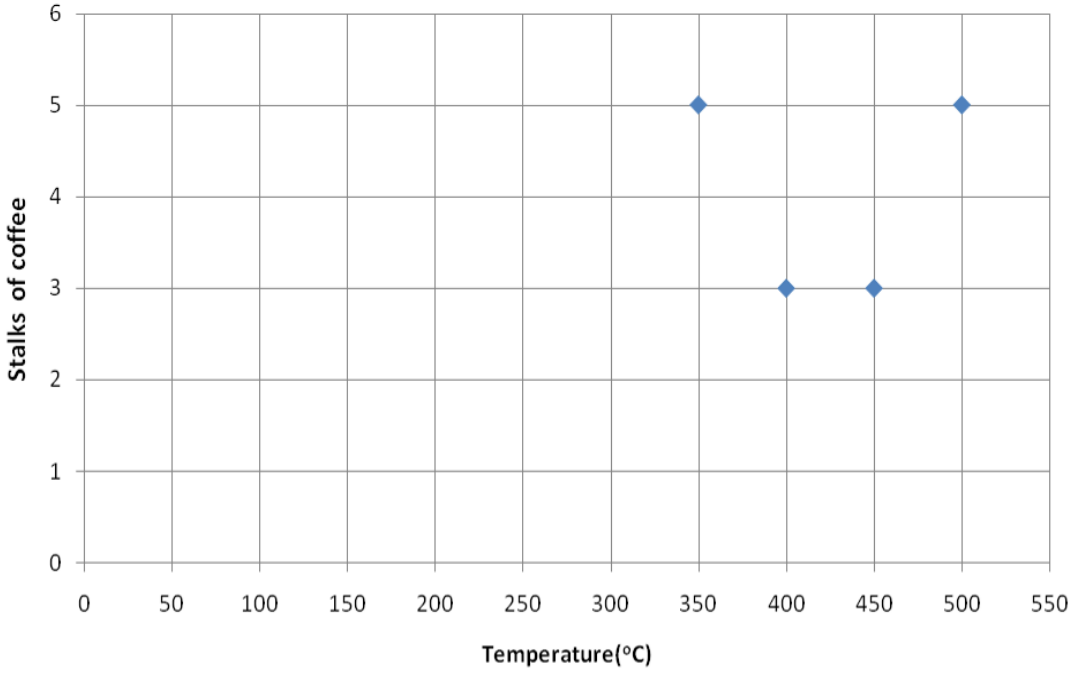
Graph 12.15. Preservation of DCB (U) after charring under anaerobic condition (350-500 °C).



Graph 12.16. Preservation of WCB (U) after charring under anaerobic condition (350-500 °C).



Graph 12.17. Preservation of coffee leaves after charring under anaerobic condition (350-500 °C).



Graph 12.18. Preservation of stalks of coffee under anaerobic condition (350-500 °C).

The Archaeological Implication

As we have seen, the charring experiments show variability in the preservation of the different parts of the plant (the leaf, the bean and the stalk). Some parts of the coffee beans were more readily carbonized or destroyed than others. In the study of charred archaeological assemblages, therefore, allowance should be made for differential preservation under certain conditions. At high temperature, carbonization is very rapid suggesting the time element is most crucial at low temperatures. The longer the time elapsed in charring, the chance of getting carbonized remains of coffee beans increases although at higher temperatures there is the possibility of a partial distortion of the beans and complete transformation into ash. Charring at lower temperatures plummets moisture contents of the plant and leads to the desiccation of the plant. There is also variation in terms of the results of charring parts of the plant and the atmospheric condition under which the experiment takes place. It is axiomatic that aerobic conditions speed up the rate of charring and hence the degree to which the part of the plant changes to ash is faster at higher temperatures. Under anaerobic conditions, there is a relative preservation of the different parts of the plant although a partial destruction and transition to ash is unavoidable at extreme temperature conditions. In this context, the logical enquiry that one should ponder on transcends the correlation between the environmental setting in which charring occurs and the ensuing changes. It also has to do with environmental factors that effect and affect taphonomic processes of the plant, which I will expound on in a moment.

It is understood that charred remains of plants survive best in the archaeological record. For example, a review of the plant remains of Neolithic Britain (Moffett *et al.*1989) highlighted the presence of insubstantial quantities of charred cereal grains and relatively abundant remains of wild nuts and fruits in many archaeobotanical assemblages of Neolithic England. This has led some researchers to suggest that wild rather than domestic resources were of greater importance in Neolithic plant subsistence strategies (Moffett *et al.* 1989; Thomas 1996b; 2003; 2004:120; 2007b: 334; 1999; Robinson 2000). In light of this, one cannot rule out the potential of recovering charred coffee beans that would partly help to understand the possible use of the plant in antiquity.

The implication of the results of the charring experiment on parts of coffee boils down into the following major areas: charred remains of beans, stalks and leaves of coffee could tolerate various temperature and atmospheric conditions, and thus may perhaps be discerned in the archaeological record correspondingly, although that depends on post-depositional processes. There is relatively better tolerance of coffee beans

to higher temperatures as high as 400 ^{o}C. WCB (U) can tolerate higher temperatures (450 ^{o}C and 500 ^{o}C) although they exhibit post-charring distortions in the form of cracking. The presence of the beans in archaeological contexts depends on taphonomic and post depositional contexts.

12.3.2. Post-Depositional Preservation of Coffee

The purpose of depositing coffee beans in three pits within the same agro-ecological region was to understand the post-depositional changes that could occur to the bean. Both processed coffee beans and unprocessed dry cherries were deposited for a period of three months (end of July to end of October 2014). At the end of the experiment, recovering the beans and water sieving were carried out. The type and the weight of preserved beans after losing moisture were recorded at the end of the field experiment. The major objective was to see the difference in the rate of decay of processed and unprocessed coffee beans in the three study areas with local variations in the type of soil, and thus to see the impact of PH on preservation of coffee beans.

The depositional context (the vertical and horizontal) distribution of the coffee beans was determined by digging three different pits in Kafa, Shäka and Jimma zones of Southern Nations, Nationalities and People's Region (SNNPR) and Oromiya correspondingly. All of the pits were refilled after depositing the coffee beans in pits 2 m x 1 m grid with variable depth (40 cm at Coce and 30 cm deep in Kafa and Teppi). At Coce, the pit excavated for this purpose was 40 cm deep where as those at Goji and Mankira in Teppi and Kafa were 30 cm deep. Coffee beans deposited are of two types: dry processed coffee at Coce and Goji, and dry unprocessed coffee beans at Mankira in Kafa. At each site, 250 gms of coffee beans were deposited for three months and the recovery of the preserved beans was carried out in early November 2014. Two methods were used in the recovery and processing of deposited coffee beans: excavation with trowel and water sieving. Water sieving was carried out using a sieve of 1mm mesh size. The soil samples were soaked in water before sieving, as is the case with archaeobotanical samples.

Figure 12.11. Left to right: Depositing coffee beans (Jimma) and recovered coffee beans (Kafa).

Figure 12.12.Lowering moisture content of coffee beans recovered from Kafa.

Table 12.7. Recovery techniques applied to the different pits in which coffee beans were deposited during the experiment.

Pit(2 m x 1m)	Depth(cm)	Recovery techniques	PH level	Weight of coffee bean(gms)
A	30	Trowel + water sieving	6.4	54
B	30	Trowel + water sieving	6.48	-
C	40	Trowel + water sieving	6.41	-

The results of the experiment on the deposition of coffee beans, its recovery through excavation using trowel and water sieving demonstrates existing variations in the preservation of coffee beans in soils with nearly similar PH level located in the same agro-climatic region. The experiement was conducted in areas where Nitosols are the dominant soil types (see soil Map of Ethiopia in Alemayehu 2003). For details on the type of soils in the study area, refer the chapter on the physical setting of the study area. While no remains of coffee beans deposited at Jimma and Teppi survived, 54 gms of coffee beans were recovered from Mankira, Kafa. Notwithstanding the presence of similar agro-climatic conditions in the three areas, the variation in the preservation of coffee beans deposited for a period of three months was not, in effect, attributed to the PH level of the soils (6.4, 6.48 and 6.41) at the locales in Kafa, Teppi and Jimma respectively. Nevertheless, it is partly owing to the type of coffee beans deposited in the three areas and the moisture holding capacity of the soil in which coffee was deposited. The soils of the base of the experimental pits at Goji and Coce were wetter than the soil of the pit at Mankira both during the time of deposition and recovery of the beans. The preservation of coffee beans, though of little weight (54 gms), at Mankira is partly attributable to the deposition of unprocessed dry coffee beans. It is reasonable to surmise that the presence of the hull covering the beans perhaps added up to the slow rate of decay whereas its absence in processed coffee beans have a negative effect as water can easily seep into dry processed coffee beans thereby accelerating the rate of decomposition along with the action of micro-organisms. The variation observed in the preservation of deposited coffee beans, therefore, is credited to the water holding capacity of the soil and the presence or absence of pulp containing the beans and the action of soil decomposing organisms. The physical experiment on the preservation of coffee bean is redolent of the lesser chance of recovering archaeological remains of coffee beans in wet environments in general, and open-fields in particular. The prospect of finding archaeological evidence of the consumption of coffee, though, might not directly come from remains of coffee beans, whether charred or not. Realistic, but indirect

evidence on the subject is deemed to come from pottery and perhaps charred remains other than beans, a subject to be addressed by future archaeological studies involving large-scale excavation in still habited or previously habitable parts of southwest Ethiopia and even in parts of the country to the east of the Rift Valley.

CHAPTER 13

COFFEE AS AN AGRICULTURAL HERITAGE

The cultural inheritance of Ethiopia is embedded in the deeper past -where the diverse languages, religions and customs lie. In this regard, the role of Ethiopian archaeology in the exploration, explanation of the past and the creation of national greatness and identity cannot be overlooked. After all, the country currently leads African countries in terms of the number of its heritage sites registered in UNESCO's World Heritage List, with eleven of its heritage (eight tangible and three intangible heritages) inscribed in the list. The only of these known to comprise what Koohafkan and Altieri (2011) dubbed as Globally Important Agricultural Heritage Systems (GIAHS), agricultural heritage systems featuring various tribal agricultural practices and techniques of managing soil, water and crop cultivars in sloping lands and hills, is the Konso cultural landscape in southern Ethiopia. This chapter briefly presents how coffee is currently viewed as an agricultural heritage among peoples of southwest Ethiopia, chiefly the Kafecho and the Oromo although it is generally considered nationally and internationally that this part of the country is the birthplace of a plant that has become a global beverage. While this part of the dissertation recognizes the national significance of coffee as a heritage, it outlines emerging but veiled trends of conflict in creating historical attachment with the origin and the first use of the plant and the monumentalizing process through the establishment of museums at two different sites in the region. I also explore how the competition for the history of the origin of the plant has developed and outline the interests of the various actors involved in the birth of a National Museum of Coffee at Bonga, Kafa.

13.1. Coffee as a Globally Important Agricultural Heritage

"Writing as a confirmed devotee of espresso, I believe that coffee must rank high among Africa's contributions to the world"

Peter Mitchell (2005:88)

Mitchell's avowal of coffee as a gift of Africa to the rest of the world is not hyperbolic. The fact that Ethiopia is universally acknowledged as the origin and center of diversity of *Coffea arabica* is an interesting subject to be dealt from the perspectives of heritage. In the following paragraphs, I argue that the cultivation system of the plant in Ethiopia falls well under what Koohafkan and Altieri (2011:2-4) listed as Globally Important

Heritage Systems (GIAHS) and that the consumption of the beverage entails an element of cultural heritage. Globally Important Agricultural Heritage Systems (GIAHS) refers to "remarkable landscape which are rich in globally significant biological diversity evolving from the co-adaptation of a community with its environment and it needs and aspiration for sustainable development" (FAO 2002 through Koohafkan & Altieri 2011:1).

Most of the coffee cultivation system in Ethiopia, though under a serious threat of deforestation over the last few years, can be regarded as a time tested ingenious blending of techniques and practices that have led to an environmentally friendly exploitation of resources and conservation of biodiversity. Hundreds of examples could be provided for GIAHS although they could boil down to ten different categories. These are: (a) mountain rice terrace agro-ecosystems, (b)multiple cropping/poly-culture farming, (c) understorey farming systems, (d) nomadic and semi-nomadic pastoral systems, (e) ancient irrigation, soil and water management systems, (f) complex-multi layered homegardens, (g) below sea level systems, (h) tribal agricultural heritage systems, (j) high value crop and spice systems, and (j) hunting-gathering systems. Of these ten GIAHS selected based on their values in ensuring local food security, provision of high levels of agro bio-diversity associated biological diversity, store of indigenous knowledge and ingenuity of management systems (Koohafkan and Altieri 2011), the coffee cultivation system in Ethiopia fits well to two of them: understorey farming system and high value crop and spice system.

In Ethiopia, it is believed that there are about 10 million people belonging to over half of the country's ethnic groups with a myriad of cultures, languages and social organizations who cultivate and utilize coffee which is also consumed all over the country. Many of the coffee growers live in areas characterized by rich and sometimes unique agricultural biodiversity, within and between species, but also at ecosystem and landscape level. Having been founded on ancient methods, some of these systems are related to important centers of origin and genetic diversity of domesticated plants and animal species, the conservation of which is of enormous global value. Coffee can also be viewed from an intangible cultural heritage perspective. In a succinct commentary that appeared under the rubric "*A Taste of Law and Coffee – From Macrocosm to Microcosm,*" Merima Bruncevic and Philip Linné (n.d) argued that coffee and possibly its taste could meet the characterization of "de-territorialized intangible cultural heritage." In view of that, the consumption of the beverage plays an important role in the production of identities, life styles both nationally and globally. The preparation of a delicious cup of coffee, in itself, can be viewed as a form of art, and if the act of the

consumption of coffee is explained as a ritual, it means that there is much more to be said of the plant than just its economic values, and related ecological issues. In cultural heritage terminology, intangible cultural heritage (see UNESCO 1970 Art.2) is described in the following manner:

> The "intangible cultural heritage" means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity.

Coffee, as a plant and a beverage, is actually relatable to three of the five areas of UNESCO's description for intangible cultural heritage. Accordingly, it can also be related to (a) criteria number 3- social practice, rituals and festive events, (b) criteria number 4- knowledge and practices concerning nature and the universe, and (c) criteria number 5 -traditional craftsmanship. Recalling the discussion on the socio-cultural values of coffee in chapter 10, the social-practice of coffee includes buttressing relations between neighbors, creating a forum to socialize at family level, and its role in communal activities and rituals. The knowledge and skill involved in the cultivation of coffee, and transforming the beans to the beverage can be related to criteria number 4 and 5.

Since Ethiopia is the origin of *Coffea arabica* and a center of diversity of this species, there is a need to acknowledge its global contribution that has greatly affected the socio-economic system of several countries in the world. Notwithstanding UNESCO's efforts to ensure the preservation of wild coffee varieties through the establishment of the Kafa Biosphere Reserve in 2010[194](Kafa Biosphere Reserve n.d) and the Sheka Biosphere reserve in 2012 (UNESCO 2012), there has to be a concerted effort in conserving the plant in its alleged home of origin, southwest Ethiopia. Because *Coffea arabica* is the most widely commercialized and consumed variety in the world, there is also a need to acknowledge its home of origin through formally recognizing the plant as part of Ethiopia's World Heritage.

[194] The Kafa biosphere reserve is the first biosphere reserve in Ethiopia and the first coffee biosphere reserve of the world Kafa Biosphere Reserve (n.d).

13.2. Contested Sites of Coffee Origins: The Veiled Paradox

Today, the trend in Ethiopia is to link ancestors of present day ethnic groups with some of the country's cultigens. The Gurage and Kafecho have rivaled over the origin of *ensät* to their respective localities (see Bekele 2010:20), while the Kafecho and the Oromo have emerged as the two contending ethnic groups in relation to the origin and first use of the coffee over the last few years. In the process of a peaceful, yet litigious rivalry, a National Museum of Coffee was born at Bonga, while an attempt to build a museum at Coce-Lämi of Gomma in Jimma remains an archetypal example of a failed project in the contention for the history of the plant. The following parts of the chapter address the way *Coffea arabica* is conceived as a heritage and the recent rivalry between the two areas of southwest Ethiopia historically tied with the origins of coffee and the birth of a National Museum of Coffee. The idea, here, is to explain how the plant emerged as an agricultural heritage amidst claims of historical ownership between ethnic groups in the region and point out the grounds on which the plant could be another heritage with outstanding universal value, perhaps a world heritage from Ethiopia.

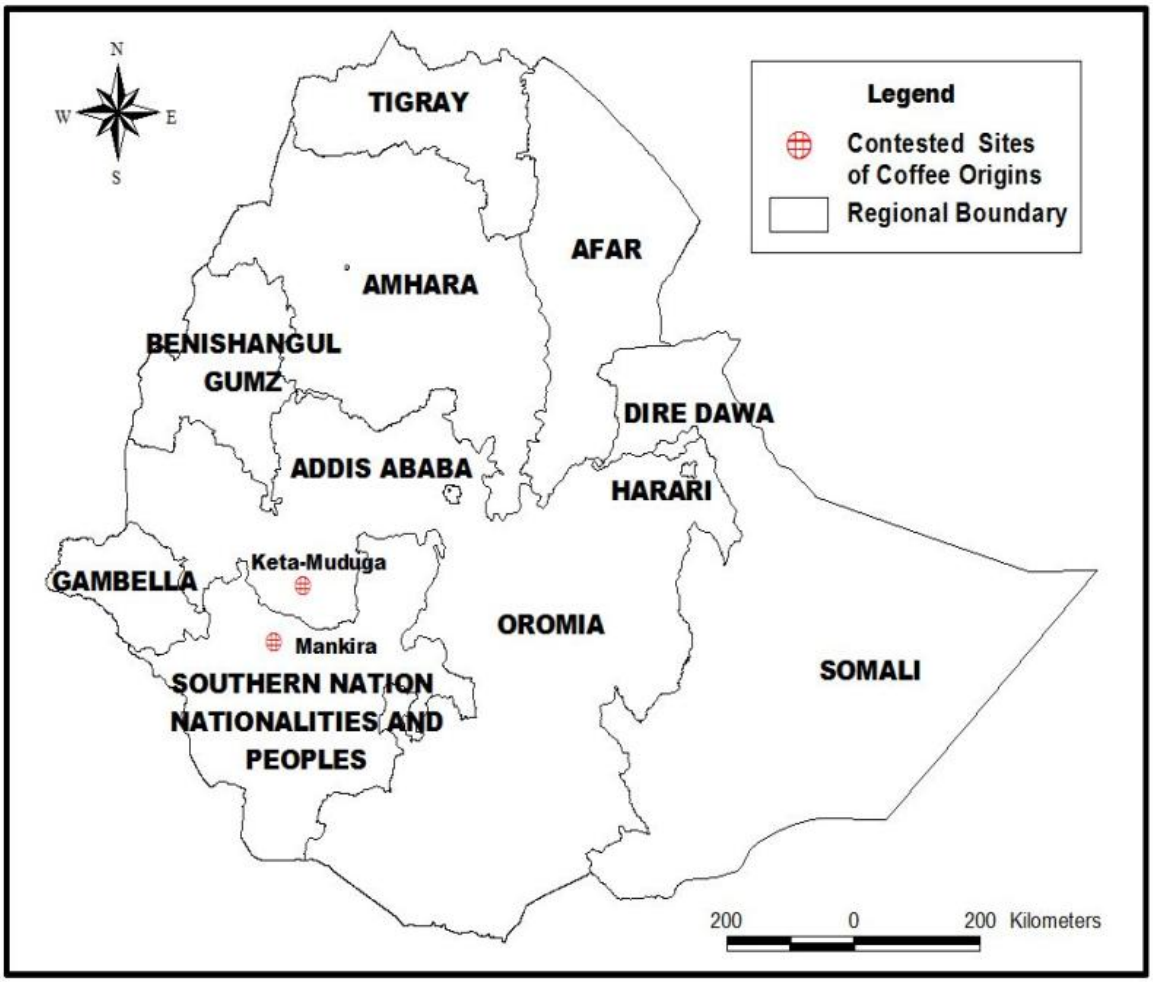
Heritage and history are two core elements of all cultures (De la Torre 2002). In this context, coffee's history and its cultural values have also been used in building cultural pride among the peoples of southwest Ethiopia, chiefly the Kafecho and the Oromo of Jimma. This is manifested in monumental structures and seldom in declarative statements written in public places proclaiming the historical and cultural attachment of the people with the plant. Paintings, portraying the Ethiopian coffee ceremony common across all strata of the society, are typical of many parts of Ethiopia. The construction and erection of colossal representations of coffee pots typical of the Kafecho and the Jimma Oromo at Bonga and Jimma correspondingly exemplify the move in the making of an agricultural heritage. People in coffee-growing areas of Ethiopia and particularly of Kafa and Jimma pride themselves as living in a land where coffee grows in profusion. The representation of cultural materials -a spoutless coffee pot and bamboo made coffee cup (*tinjano*) at Bonga and the traditional coffee pot of the Jimma Oromo in Jimma- not only reflect the coffee culture of the people but the surge towards the creation of a heritage to which the people link themselves.

Figure 13.1. A monumental coffee pot (*bune-qondo*) at a public square in Bonga. Notice the representation of pouring coffee from the pot to a coffee cup (*bune-tinjano*).

Figure 13.2. The construction of heritage: A representation of a coffee pot at an entrance of a cafeteria in Bonga bearing a declarative statement that reads “Kafa: the origins of coffee.”

Figure 13.3. One of the two monumental coffee pots constructed in Jimma.

In recent years, two areas in southwest Ethiopia, namely Mankira in Kafa and Coce-Lämi in Jimma- are rivaled by the Kafecho and the Oromo as birthplaces of *Coffea arabica*. The coffee forest at Mankira is claimed by the Kafecho to be the site where "the mother tree of all coffee" is found. On the other hand, it is contended by the Oromo that Käta-Muduga at Coce-Lämi locality in Jimma zone is traditionally regarded as a spot where the fabled goat herder –Kalid- encountered a frisking goat that was eating coffee cherries growing wild in the area. Both the Kafecho and the Oromo have relied on textual evidence and oral traditions to legitimize their claims.



Map 13.1. Two contested sites of the origins of coffee in Mankira in Kafa and Käta-Muduga of Coce, Gomma.

> Places are continually changing, and our perceived present is always a form of pastness. It is our contingency of the past on our daily which must be articulated through the museum.
>
> Walsh 2003: 150

The history and genetic evidence presented in the preceding chapters of this dissertation validate that southwest Ethiopia is the center of origin for *Coffea arabica*. The move to pinpoint the birthplace of the plant to a particular site within the same agro-ecological region is a debut of a paradox in the history of the plant. Given the rise of ethno-nationalism in Ethiopia, the overall subject of dealing with the rivalry over the plant becomes delicate. My intention, here, is neither to argue for nor against either Mankira of Kafa or Käta-Muduga of Coce as a birthplace of the plant, but to view the subject in the context of what

Trigger(1984:360) described as the principal role of nationalistic archaeology, "… to bolster the pride and morale of nations or ethnic groups." Evidently, many countries in different parts of the world have used heritage from the past for nationalist purposes (see Kohl 1998:223-238). Both the Kafecho and the Oromo have made the move from a similar context. In the process, they have been locked in a cultural arms race to build their own respective museums, strikingly with a varying degree of success so far. Be it that it may, I would not like to affront any group's sensibilities, pride or right over heritage.

At Coce -Lami locality, the site of Käta-Muduga is famed as the legendary birthplace coffee where Kaldi, the mythical goat herder found his flock excited under the effect of coffee after eating the red cherries of a wild bush in the highland forest. To corroborate the oral tradition, informants point to what they consider is a footprint of the frisking goat at the site. I would say this and many of what appear to be humanly fashioned figurines on the rocky surface of the gentle slope at the site are rather geologic.

Figure 13.4. A supposed footprint of a goat at Käta-Muduga, Coce-Lämi.

In the race to validate the historical ownership of coffee, both the Oromo and Kafecho have made realistic efforts in their alleged sites of the birthplace of the plant. Evidently, there are now road signs on the Jimma –Agaro route, where a signboard by Bureau of Culture and Tourism of Gomma standing 10 km west of Coce declares that the site is the birthplace of *Coffea arabica*. The same signpost stands 1 km along the street running from the rural locality to Käta-Muduga. On June 1, 2007, the then president of Oromiya

Regional State, Abba Dula Gemeda placed a marble plaque on the hilltop of the site for the foundation of a museum at the site. Four weeks after this incidence, another cornerstone to build a national coffee museum at Bonga was set by the then President of the Federal Democratic Republic of Ethiopia, Girma Woldegiyorgis. The inception of the idea of establishing a National Coffee Museum at Bonga surfaced during the discussions of the Ethiopian Millennium Festival National Council in 2007. Truly speaking, the birth of a National Museum of coffee and its official inauguration in May 2015 is a step to transform coffee into heritage.

Figure 13.5. A signboard erected at Bulbulo along the Jimma-Agaro highway for the birthplace of *Coffea arabica* at Coce-Lämi.

Figure 13.6. A mini non-operational museum of coffee constructed at Käta-Muduga, Gomma.

Figure 13.7. The National Coffee Museum at Bonga under construction(2013).

While the need to monumentalize Ethiopia's contribution to the world and gaining the appropriate respect and advantage through the museum is a priority, exhibiting artifacts and pieces of art related to coffee consumption and serving as a hub of research on coffee is equally important both from a scientific and touristic point of view for the area.

Looking at the efforts to monumentalize the origins of coffee from the stance of heritage values elaborated by Marta de la Torre (2002:11), two major values associated to the heritage aspects of coffee are socio-cultural and economic. In this context, the historical, cultural (symbolic) and social values of coffee falls within the former whereas the use (market value) of the plant represents the economic values for the people and in southwest Ethiopia and the country at large. Notwithstanding the cultural arms race between the Kafecho and the Oromo over coffee, the birth of a National Museum of Coffee in Ethiopia[195] ensues from the heritage values of the plant, mainly from its association with the economy of the country, the livelihood and culture of the people. The contested sites of coffee origins in southwest Ethiopia represent a typical example of the race for ownership of the history of the origin of a plant. There is, however, a need to note the legitimacy of the claims made by the Kafecho and the Oromo since they live in an area considered as the world's cradle of coffee. The significance of the contested sites of origins (Coce and Mankira) outside their agro-ecological settings is inferable from the names attached to a hotel in Bonga and two coffee houses in Addis Ababa. The presence of a hotel in Bonga and a café at Piazza in Addis Ababa bearing the name "Mankira" and a café of the Coce Fine Coffee PLC, adjacent to the *Chemin de Fer* building, in a locality known to this day as *Lagar,* resonates the values attached to the two contested sites.

[195] The Museum was officially inaugurated in May 2015.

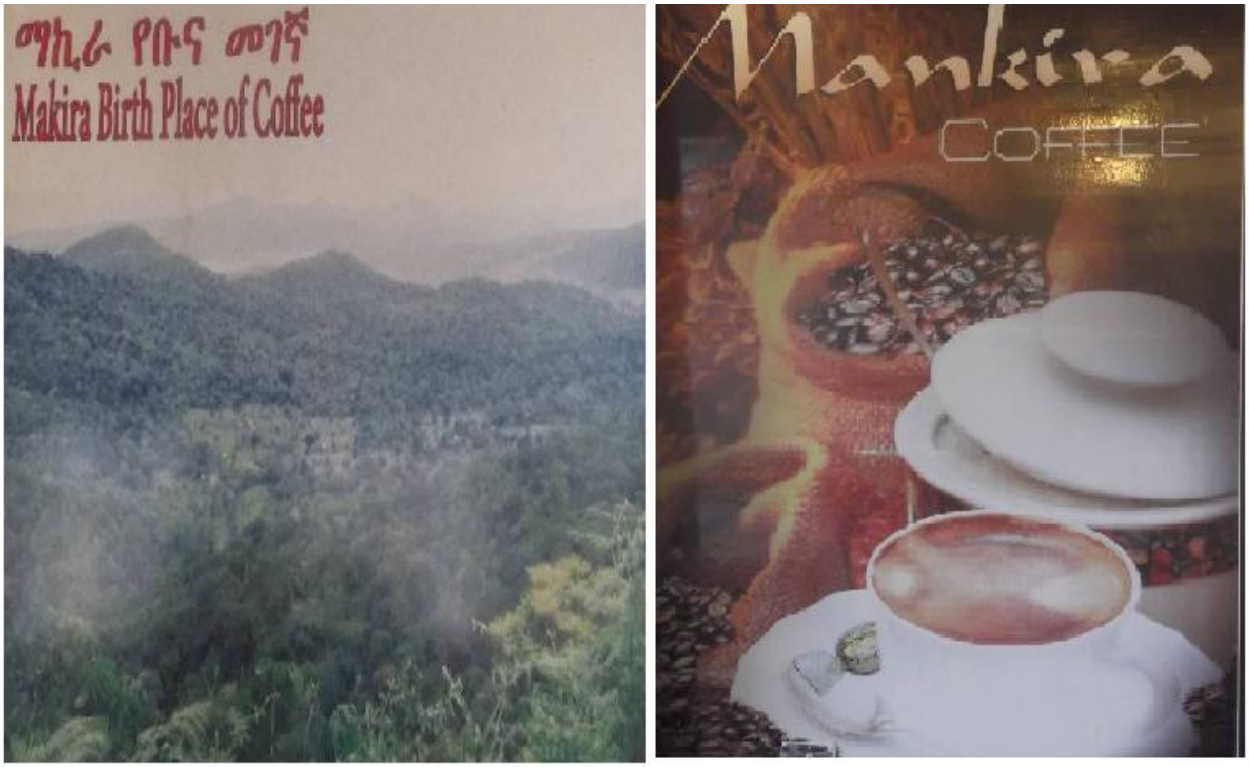


Figure 13.8. Left: A picture of the Mankira environs, Mankira Hotel-Bonga. Right: A painting at Mankira coffee house, *Piazza*-Addis Ababa.

Figure 13.9. The Coce Fine Coffee PLC.

Figure 13.10. A canvas painting portraying the Ethiopian coffee ceremony.

While still explaining the different initiatives to monumentalize coffee at regional and national levels, an additional component of the moves made by the Jimma University is worth mentioning. The logo of the institution seen below has been formally in use since 2008 in the aftermath of the initiatives made to establish coffee museums at Bonga and Coce. It is meant to reflect that coffee is at the heart of the livelihood and the culture of the Oromo of Jimma, and I view this surge as part of demonstrating the university's presence in the community, if it is not part of the veiled regional cultural arms race over the origins of coffee.

Figure 13.11. Coffee as part of the logo of the Jimma University.

Coffee in the 21st century Ethiopia is not only an important source of revenue and a beverage lavishly consumed in households and public places (for instance, cafeterias and recently street coffee shops), but also emerged as a contested agricultural heritage. Looking into the current trends of associating the origins of *Coffea arabica* to two sites situated in the same agro-ecological region, it is axiomatic that the plant has become significant in shoring up the identity of the people. The tug of actions in monumentalizing the origins of the plant should, therefore, be viewed as a veritable example in the making of agicultural heritage and bolstering ethnic identity at regional level while the birth of a National Museum of Coffee, *inter alia*, remains iconic for a country that gave the plant to the rest of the world. These heritage initiatives are imposed from above by regional authorities and the heritagization of coffee is oriented towards Ethiopians and towards potential foreign visitors.

CHAPTER 14

REMARKS AND CONCLUSIONS

Coffee needs almost no introduction. It is one of the most enjoyed drinks in the world. *Coffea arabica,* the most widely consumed variety of coffee, is the Ethiopian domesticate par-excellence though it is not alone. Anchoring on historical data, one might find it hard to speak of the origins and the first use of coffee accurately notwithstanding the presence of apocryphal stories embellishing the history of the plant. Textual evidence on the origins of the plant is meager, predominantly mythical and expounding the origins of the plant based on the etymology of the word is dubious and thus, a debated subject. Even then, this popular view linking the term coffee with Kafa still casts a shadow in literatures dealing with the origins of the plant. In fact, *Coffea arabica*'s association with Ethiopia is backed by both historical and genetic evidence. Concurrently, the first use of coffee may perhaps extend back to the time unrecorded by historians. My presupposition rests upon the fact that the peoples and cultures of the southern half of Ethiopia were less known to travellers who documented about peoples and kingdoms farther north of the alleged birthplace of *Coffea arabica*. Notions of a broadly Arabian origin of coffee pots prevail because of a remarkable absence of evidence for coffee technologies. It seems by no means impossible that ancient Ethiopians possessed the knowledge of preparing and consuming coffee although both textual and archaeological data do not validate this. Regrettably, there is no credible evidence for pre 16th century use of coffee at least as an item of tribute and its consumption prior to the 18th century. Absence of its mention earlier than this does not necessarily rule out the possibilities of its earlier use. Beginning from the end of the 19th century, however, coffee has been among the list of Ethiopia's desiderata becoming more common and less exotic. In this context, there is no denying that the beginning of acceptance of the consumption of coffee has had profound consequences in the socio-economic and cultural spheres of the Christian community and their relations with non-Christians.

Coffee's uniqueness, among other indigenous plants, lies in that the decoction prepared from this plant has become a universal beverage. Although well documented historically, the subject is underexplored archaeologically. The dimly apprehended nature of the origins of coffee, its cultivation and consumption gains additional ethnoarchaeological significance from the fact that current methods of cultivating the crop, the preparation and the consumption of the beverage remain principally traditional. This chapter is but a

brief sketch and discussion on some results of ethnoarchaeological study among the Kafecho, the Majangir and the Oromo in southwest Ethiopia.

The archaeological record in Ethiopia is lamentably silent on the early cultivation and consumption of coffee. Unlike pottery, coffee beans have been frustratingly invisible archaeologically though recent discovery of coffee bean fragments in a rock-shelter at Kafa (see Hildebrand *et al.* 2010) has shed light on the possibility that the beans could survive in archaeological contexts and this might not encourage the likelihood that coffee was not used earlier than presumed. Nonetheless, it is one thing to discover archaeological remains of coffee but quite another to understand whether they were culturally or naturally deposited. On the other hand, the occurrence of coffee grains in medieval dumps of Somaliland dated between the 12th to 16th century AD (Curle 1937:324) shows the exploitation and commercial role of the plant at that time. This, in itself, implies neither the absence of evidence nor evidence of absence on the subject. Excitingly, the merest archaeological occurrence of coffee beans in southwest Ethiopia, coupled with ethnoarchaeological research in the area, suggests that the time is ripe for reappraising the archaeological questions related to the plant.

Only rarely can direct botanical evidence relating coffee be recovered from archaeological contexts in which case investigating formation processes related to coffee and *kari* pots becomes crucial. The study implies human agency (C-transforms) as a significant dynamic in the switch from systemic to archaeological (S-A) context of coffee pots. I look at each of these in turn. I have argued that there is a striking variation in the life cycle of coffee-related pots across households, which in part is attributed to the difference in the type of breakage which either allows or forbids secondary use of artifacts, and partly relatable to the economic status of individuals which determines the stage at which a pot could be replaced. Ethnographic data on site formation shows that cultural factors are principal in the S-A transfer of potsherds. The implication is that the use, reuse and discard of coffee-related pots is higher among coffee producing communities of the region. The possibility of recovering such remains is enormous in midden sites where discards are dispersed either as secondary refuse or in places where breakage occurs leaving evidence of primary refuse in abandoned houses. It means that coffee related-pots (i.e coffee pots, *kari* pots and coffee roasting- griddles) have a high degree of use-breakage and discard rate than cooking pots. This is because given the relatively repeated use of the pots during the preparation of the beverage, the

probability of breakage as a result of thermal stress and the relatively high rate of collision. I will soon expound this subject in relation to the life cycle of pots.

The chances of identifying remains of coffee left because of processing the plant at the end of harvesting and during the pre-consumption stage of the beverage is difficult because the hulls removed from the beans do not leave any fossilized or charred remains detectable in archaeological context. This is attributed to the fact that hulls are either taken away by wind and water or used for different purposes (as fodder for animals, fertilizer and source of fuel). Experimental study in open fields of southwest Ethiopia has shown that the preservation of dry coffee beans is impacted by the water holding capacity of the soil, the action of microorganisms and the presence or absence of hulls at the time of deposition. Evidence relating the processing and consumption of the plant possibly occur in the form of intact or fragments of sherds, despite the possibilities of uncovering charred coffee beans in archaeological context although that also awaits future archaeological research. Nonetheless, one cannot rule out the possibility of recovering carbonized remains of coffee beans in abandoned houses though the occurrence of such remains presents another analytical hurdle as to whether the resultant charring is accidental or cultural. I presume a rather concrete evidence on the preparation and consumption of coffee can come from archaeological deposits bearing coffee-related artifacts.

I now turn to recap the nature of coffee cultivation its implications. In southwest Ethiopia, the cultivation of *Coffea arabica* is chiefly reliant on the presence of the forest in the region. This is essentially true of forest and semi-forest coffee cultivation systems whereas farmers plant shade trees to grow coffee under garden cultivation system. Coffee cultivation in the region has largely remained traditional notwithstanding the presence of plantation coffee contributing to a very small portion of the total production. Since *coffea arabica* is a shade-loving plant, farmers pay a great deal of attention to the preservation of the forest in which coffee grows naturally as under-storey shrub.

Coffee cultivation methods in southwest Ethiopia exhibit a high degree of similarity in terms of seedling acquisition, care in the field and harvesting methods. The four coffee cultivation systems (forest, semi-forest, garden and plantation coffee), like nowhere else, are found in Ethiopia and all of them are represented in Kafa. What does this indicate? And what opportunities does it provide?

The presence of the four coffee cultivation systems points to the variability in the degree of human involvement in the natural growth and reproduction of the plant. Common agronomic practices under garden coffee cultivation entail methods of seed selection, preparation of seedlings, care in the field and harvesting. Seeds are often selected from healthy and productive coffee trees and sown on coffee-beds prepared nearby households or coffee farms where there is access to water. Seedlings can be obtained from spontaneously growing coffee seeds. Self-sown seedlings are left either where they occur, or planted in spacious parts in coffee farms under forest and semi-forest coffee cultivation system in Kafa and garden-coffee cultivation systems in the three study areas. The degree of using spontaneously grown coffee seedlings in garden-coffee cultivation systems is relatively higher among the Majangir. Such activities as mulching, hand weeding, hoeing at nursery stage, weeding, hoeing, slashing and pruning in the field call for a high degree of attention in garden-coffee cultivation system. The degree of human intervention in the natural growth of coffee is, therefore, minimal in semi-forest and forest-coffee cultivation systems.

From archaeological point of view, current methods of cultivation chiefly furrow cultivation applied in hilly parts of Jimma and Kafa could leave traces of modified landscapes in the form of trenches. In this context, the likelihood of recovering once coffee cultivated coffee fields based on such modified landscapes might present analytical hurdle as furrow cultivation is also used in the cultivation of other staple crops grown in these areas. Even worse is the possibility that furrows can easily be modified due to further ploughing, and the growth of bushes and trees. If not, such furrows might leave negative archaeological features with which to interpret the techniques employed in coffee cultivation.

Pulling together ethnographic observation on current methods of selection of seeds and transferring self-sown seedlings from semi-forest and forest-coffee to coffee farms under garden-coffee cultivation system, one can infer the possible scenarios under which humans first tended and gradually domesticated the plant. Based on current trends in the exploitation and cultivation of forest-coffee in southwest Ethiopia, it is possible to state confidently that the process of domestication of the plant is an ongoing process since farmers depend on self-sown seedlings growing in the forest and harvest the yield with minimal intervention.

Another aspect of coffee cultivation is technology. There is similarity in the use of industrial products in transporting and storing coffee. The machete, known as *gäjäro, jame* and *gäjära* among the Kafecho, the

Majangir and the Oromo, is a versatile agricultural implement used in slashing the undergrowth, cutting tree climbers and branches of small trees including of coffee trees. While the simultaneous act of digging stick, *horda*, is widely used among the Majangir, the *gäso,* a composite digging tool made from a shaft attached to a metal sheath is commonly used by the Kafecho, the Majangir and the Oromo. Two other wooden agricultural implements, *hoko* in Kafa and *oko* in Jimma are employed in bending weeds and undergrowth while slashing fields and weeding coffee farms. The same point holds true for *gomo*, a larger wooden implement only used in Kafa. Unlike *oko* and *hoko, gomo* is held by one man who bends the bush while slashing is done simultaneously by another man. Its function is more pronounced in the preparation of coffee fields and seedling beds.

Family labor is at the heart of the cultivation and harvesting of coffee under traditional coffee cultivation system. Most of the task in coffee production is a male undertaking (for example, seed selection, seedling bed preparation, sowing seeds and slashing), where as planting seedlings, weeding and harvesting involve both male and female as well as children. Processing coffee (drying, dehusking, and sorting) is essentially a female activity. Despite the dwindling nature of communal works (*dado*) during harvesting of coffee, the Majangir have continued the practice in cyclic manner where as the use of seasonal laborers is common among Oromo farmers in Gomma.

Sun drying is a common method of drying coffee among farmers in southwest Ethiopia. Not only the method of drying coffee, but also the materials involved in the process show a high degree of resemblance. For instance, wooden drying beds known as *qombo-shibo*, *bäyroy* and *sire-buna* are used among the Kafecho, the Majangir and the Oromo correspondingly. Mats, known as *bune-qono,* are used only in Kafa notwithstanding the vanishing nature of its production and use over the last few years.

From technological standpoint, the production of the array of pottery products used in the preparation and consumption of *kari* and coffee is in the hand of skilled potters most of whom learn the art at an early age. There is, indeed, a conspicuous disparity in the type of materials used in the acquisition of clay and methods of paste preparation. For instance, potters in coffee growing regions in Kafa mainly of Mänjo and Manno employ some materials used in the production of coffee (for instance, baskets like *kofo* and *zämbil* in transporting clay whereas these materials are unknown among Mäniyo potters living in the district of Adiyo, a non-coffee growing region in the highland part of Kafa. Like the Mänjo and the Manno in Kafa,

Majang potters use *kante,* a basket used during harvesting of coffee to transport clay. The machete, an implement used in slashing agricultural fields in the coffee growing region of southwest Ethiopia, is also used by Kafecho, Majang and Oromo potters in quarrying clay and in thinning the base of coffee roasting-griddle by Oromo potters at Gänji-Dalächo near Agaro. An additional realm of variation among potters in the study area has to do with the materials and techniques used in paste preparation. Mänjo and Manno potters in Kafa, like their Oromo and Oromized Yäma counter parts, use a wooden log and a flat stone to pound clay and mix it with water and temper (straw), where as paste preparation among the Mäniyo and some Oromized Yäma potters involves battering the paste with foot. On the other hand, Majang potters use wooden pestle and wooden barrel to pound clay and prepare moldable paste without any tempering material.

The conspicuous variation in the *chaîne operatoires* of coffee and *kari* pots arises mainly from morphological differences of pots and potters' orientation at the time of apprenticeship. The time required to produce a pot vary depending on its size and the presence or absence of decorative motifs on the pot. In this context, coffee pots and *kari* pots take longer time compared to such pottery products as coffee roasting-griddle, incense burner and the *wäciti* and *hartu* of the Oromo. Despite these differences, two other methods, sun drying and open air firing (bonfire) are commonly employed by potters in southwest Ethiopia.

There is also a striking variation in terms of the typology of coffee pots produced in the study area. Among the Oromo in Jimma, for instance, some coffee pots are designed for ritual reasons and the type of decoration and the number of spouts are determined by a person possessed by a spirit (*ayanä*) before the onset of production. Spoutless coffee pots with layers of rippled decorative patterns (*märta*) are produced for people possessed by a spirit (*ayanä*) and for individuals practicing *atete*, a female ritual invoked for the health, fertility, and childbirth or for some other special occasions. While most coffee pots produced among the Kafecho are of utilitarian purpose, pots purchased from Mänjo potters in Kafa are not used in rituals-a practice that largely reflects the "uncleaness" of the socially marginalized Mänjo.

Linking to typology of coffee pots, it is appropriate to note some of the perceptible similarities and differences in decorative patterns employed among potters in the study areas. Incision is typical on coffee pots produced by Kafecho, Oromo and Majang potters. The same technique is employed in decorating *kari*

pots of the Majangir. Plain coffee pots are also produced by Mänjo and Manno potters in Kafa, while two techniques, rippling and incision are employed to decorate coffee pots by Mäniyo and Oromized Yäma in Kaffa and Jimma respectively.

The social aspect of pottery is another interesting aspect that deserves exposition. In this regard, it is important to underscore the presence of certain marked similarities and differences in the social position of potters. Certainly, potters' social position, excepting the Majangir, falls within the lower stratum of the caste system manifested in settlement pattern and a certain degree of exclusion in communal activities and marital relations. The presence or absence of a caste system among the three ethnic groups is largely attributed to the social history of the people. While the presence of occupational castes is known in the past among the Kafecho and the Oromo of Jimma, the egalitarian ethos of the Majangir and the biblical notion of equality before God must have contributed to reinforce egalitarian values that existed long before the introduction of Christianity and hence, the absence a caste system among the people. Even within the class of potters in Kafa, there are certain evident disparities in the attitude of non-potters' towards potters of the three endogamous castes, Mänjo, Manno and Mäniyo. No doubt that their Oromo counterparts, Oromized Yäma potters (*fuga*) at Molle and Märäwa and Oromo potters near Agaro in Jimma zone, belong to an equally lower stratum within the social hierarchy although the scale of marginalization among Oromized Yäma potters is quite pronounced compared to Oromo potters near Agaro. The roots of this variation is perhaps related to the difference in the prevailing attitude of non-potters to the artisans, the relatively secluded settlement pattern of Oromized Yäma and the social vent created in such relations as marriage, communal works and common coffee. On the other end of the spectrum is the absence of occupational caste system among the Majangir where potters livelihood, marital and social relations are not defined by the skill of making pots.

Judged from the results of the current ethnoarchaeological research, there is a direct relation between the social status of potters, and the variety and the quality of pots they produce. Consequently, Majang potters, produce a range of pots: water jars, beer pots and pots used in culinary practices including those in preparation of coffee and *kari*. Majang potters produce not only diverse but of the highest quality of pots despite the variation in the types of pots individual potters produce. Conversely, marginalized potters among the Kafecho and Oromo produce beer pots, water jars, pots used in culinary practices and coffee pots but with conspicuous differences in terms quality and diversity of pots within each groups.

Ethnographic observation also points to the presence of an evident discrepancy in terms of the number and types of coffee related pots produced among the subaltern clans(Mänjo, Manno and Mäniyo) in Kafa where Manno coffee pots are preferred over Mänjo pots. This has to do with reasons that are far from the crude nature of Mänjo pots but principally ascribable to the fact that their pots are not used for rituals. Compared to the other two groups in Kafa, Mänjo potters produce small number of pots less preferred over Manno and Mäniyo pots. While Manno and Mäniyo potters produce fine quality coffee roasting-griddle and coffee pots, the latter tend to produce the largest number of coffee griddles than the rest. Much the same is true of the extent to which Oromo potters specialize in the production of coffee-related pots. While Oromo potters at Gänji-Dalächo near Agaro and Oromized Yäma at Molle regularly produce coffee roasting-griddle, *wäciti, hartu,* incense burner, stove and other kinds of pots used as containers and beer pots, the production of coffee pot is a skill possessed by only few elderly potters who, in most cases, produce coffee pot for consumption at household level. Contrary to the situation at Molle, coffee pot is produced in large number among Oromized Yäma potters living at Märäwa. This exemplifies spatial specialization in pottery production, a trend that can be tentatively attributed to orientation during apprenticeship.

To further elucidate the results of studies on site formation processes, it is vital to stress the presence of two broad stages in which the switch from systemic to archaeological(S-A) context of coffee related pots result from breakage at production stage and postproduction stage. Breakage at production occurs due to over firing and poor firing whereas breakage at postproduction stage is caused by such factors as collision, the action of children, thermal stress and shock during use. Ethnographic data increasingly stress similarity in terms of the extent to which breakage at production stage occurs to pots associated with the preparation and consumption of coffee. The perceptible variation in the impact of breakage at postproduction stage is irrefutably relatable to the diversity of coffee pots that each one of the groups use. To exemplify this trend, one has to think of the impact of breakage because of collision and the action of children. Collision can happen to any of coffee-related pots at any stage in the life cycle of pots particularly during use while the rate of breakage because of the action of children largely affects small-sized pots. This is particularly true of coffee pots, and incense burner among the Kafecho and the Oromo, and coffee pots and *mätägoy* among the Majangir.

Another major area of difference has to do with the rate of breakage resulting from thermal stress. Both coffee pots and coffee roasting griddle are affected by thermal stress with varying degree. Since coffee

roasting-griddles, apart from primary use, are often used in roasting cereals, baking bread, they can crack and ultimately break due to thermal stress and shock. On the other hand, coffee pots, unless cracked or broken, serve their primary function but cannot escape the impact of thermal stress as they could crack and leak or break during use. In relative terms, Majang *kari* pots (*kebet-karionk* and *kebet-sid'anonk*) are the most frequently broken pots due to thermal stress. By and large, the fundamental reason why pots crack or spall as a result of heating up on firing or during use is attributable to expansion of constituents of the fabric (see Orton and Hughes 2013:250). Nevertheless, what other major technological factors contribute to the high rate in the breakage of *kari* pots?

As there is a clear relationship between shape and function of pots, there is also an uncontestable accompanying variation in the rate of cracking or spalling of pots resulting from thermal stress. In this context, Rye (1976) suggests the importance of manufacturing round based globular pots with an even thin wall than flat based or angular pots as a means to minimize the problem of thermal stress. Besides, the production of pots with high toughness and thermal shock resistance demands high temper concentration and low firing (see Tite *et al.* 2001:301). In view of the above propositions, the high rate of breakage of globular *kari* pots resulting from thermal stress is principally ascribed to poor thermal shock resistance resulting from zero temper concentration and frequency of use in the preparation of *kari*. Accordingly, there is indisputable ethnographic evidence that thermal effect is higher in *kari* pots than in coffee pots.

Aside from their primary function, *kari* pots are used with a rather surprising frequency for boiling water and cereals. These, added with the lengthy hours spent during the boiling of three or more rounds of *kari* two or three times a day, unavoidably increases the rate of breakage because of thermal stress. On the contrary, coffee pots, which could be absent in some Majang households, are used less frequently and have relatively low rate of breakage from thermal stress. Pots exposed to wetter conditions crack and break quickly due to thermal stress during use. Hence, keeping pots on drier surface often nearby hearth is the norm in most Kafecho, Majang and Oromo households while hanging coffee pots is another resort as witnessed in some Kafecho households.

Since pots used in the preparation and consumption of *kari* (*kebet-karionk*, *kebet-sid'anonk*, and *mätäge*) and coffee (coffee roasting-griddle and coffee pots) are relatively diverse than pottery used in the preparation of coffee among the Kafecho and the Oromo, the rate of breakage at production and post

production stages is higher among the Majangir, thus leading to the formation of a large quantity of primary and secondary refuse. On the other hand, the variations in the consumption habits of the people and the kinds of pots involved in the process are the foremost reasons that account for the evident difference in scatters of refuse from coffee and *kari*-related pots. The ethnoarchaeological implication of the study on site formation processes of coffee related pots illustrates the presence of a direct link between the range of pots used in coffee preparation and consumption and the quantity of refuse. It means that the presence of diverse pots in the preparation and consumption of coffee in the systemic context invariably increases the formation of a large quantity of primary or secondary refuse in the archaeological context. Future archaeological research might furnish fresh evidence about the processing and consumption of coffee provided archaeological excavations are carried out in areas where such remains occur as primary or secondary refuse in midden sites or abandoned settlements. Given the indestructible nature of pottery, the prospect of uncovering the earliest evidence on the consumption of the plant depends on the magnitude of research in previously habitable parts of southwest Ethiopia or to the areas east of the Rift Valley.

There are also perceptible similarities and differences in recycling coffee-related pots among the Kafecho, the Majangir and the Oromo. By way of conclusion, let us briefly examine some of the trends in recycling coffee pots and the archaeological implications. One major area of similarity in lateral cycling of coffee and *kari* pots is using them to store cereals once they cannot serve their primary use due to leakage. Broken coffee pots are commonly employed in transporting fire between households or as incense burner among the Kafecho and the Jimma Oromo, where as broken *kari* pots are used to transport fire, process spices during the preparation of *kari* and perhaps serve as a base on which new pots are molded. Cracked coffee roasting-griddle are also employed in casting new griddle among some Mänjo potters in Kafa, Majang and Oromo potters. A major area of difference in the recycling of coffee roasting-griddle has to do with use after breakage. None of the three groups, but few Oromo potters use sherds from broken griddles as a turning device (base) on which molding incense burner, *hartu*, and *waciti* takes place.

The way in which coffee is used in the broader socio-cultural system of the Kafecho, the Majangir and the Oromo is of a particular subject addressed in the dissertation. Historically, the consumption of coffee, in itself, was no doubt a factor that changed the socio-cultural history of societies in the past, and it was also important in producing wealth and power evident from the history of the kingdom of Kafa and the Oromo-Gibe states. Of far greater importance, and the subject to which I now turn are the social consequences of

the cultivation and consumption of coffee. I have argued that there are certain similarities and disparities in the nature of coffee processing and consumption among the three communities of southwest Ethiopia. One principal area of similarities lies in the way the beverage is prepared from roasted and pounded beans boiled in hot water. It is spiced by salt or sugar, and is habitually consumed communally. Among the Majangir, *kari* is the typical beverage although the consumption of coffee prepared from the beans has begun very recently. While the preparation and the consumption of *kari* entirely rely on the use of pottery products, there is a slight variation in the type of materials used involved during the coffee ceremony. Common cultural materials used in the preparation of the beverage are coffee pots, coffee roasting-griddle, and wooden artifacts (pestle, mortar and coffee tray). Inspite of this, materials at the consumption stage of the infusion exhibit a slight discrepancy. For example, bamboo made coffee cups (*tinjano*) are typically used among the Kafecho along with Chinese cups (*sini*) used in many parts of Ethiopia. The use of *qulu*, coffee cups made from calabash, is common among Oromo pilgrims who have been to the Islamic shrine of Ana Jina in eastern Oromiya. The variation in the use of different artifacts during the preparation and consumption of *kari* and coffee is chiefly attributed to cultural reasons although environmental factors are concurrently essential.

The study of coffee consumption reveals the way identities are established and neighborly relations are buttressed. In the context of gender relations, for instance, the link between women and coffee is often reflected in the creation of an identity defined by the coffee ceremony. The gender relations constructed through coffee preparation and consumption is one of a subaltern status for the woman who, as in many other culinary practices, is at the service of men thereby showing their diligence and modesty. In the realm of commensality ritual, the consumption of the beverage is a means of creating and buttressing relations, thus resulting in a social obligation of attending coffee ceremonies of the host among neighbors sharing coffee. On the other end of the spectrum, coffee is a means of buttressing marginalization of subaltern clans in Kafa and occupational castes, particularly potters in Kafa and Jimma, who are not invited to coffee ceremonies of the socially dominant groups. Notwithstanding the value of coffee in hosting guests, it is uncommon to darely and instantaneously invite strangers to the ceremony and in this context, coffee serves as a boundary marker between a social group and aliens.

The recency in the introduction of coffee among the Majangir is a result of gradual acquaintance with the drink through socialization with people in their immediate surroundings. Coffee is, without questions, a plant

of enormous socio-cultural values. It is a ritual plant and the beverage is consumed lavishly during different occasions. In the past, *kari*, apart from buttressing relations between adjacent neighbors, was strongly related to traditional religious rituals although this has dwindled remarkably due to the advent of Christianity. It is, in fact, true that coffee's use in certain rituals has also declined remarkably in parts of Kafa due to the teachings of the Ethiopian Orthodox Church though some have continued using coffee in rituals at household levels. A similar trend is perceptible among the Jimma Oromo, who despite the teachings of Islam, have continued the traditional practices with which coffee is closely entwined. Offering in coffee and praising the supernatural in the medium of coffee is, thus, a living tradition among followers of the two monotheist beliefs. The social significance of coffee also reflects how the plant plays a central role in defining female identity, buttressing relations between neighbors, hosting guests and settling disputes.

It is important to emphasize not the uniformity, but rather the diversity of cultural experiences related to coffee consumption in Ethiopia. To do so is not to deny the importance of widely shared cultural values and practices interlaced with the coffee ceremony. Rather, it is to underscore the importance of moving beyond a simple consideration of a local coffee tradition to one that views coffee as a historically and culturally constituted beverage characterized by spatial differences in the scale of its economic and ritual values. Coffee's economic role in the livelihood of farmers in southwest Ethiopia cannot be ruled out despite the variation in the amount of income generated through the selling of coffee beans after harvesting. The factors that attribute for this variation have to do with the size of land under coffee cultivation, differences in the degree of management practices, the presence or absence of coffee diseases. A large production does not essentially mean high income in the market due to fluctuating coffee prices given at local markets. Unlike the Kafecho and the Oromo, the Majangir chiefly depend on the consumption of *kari,* and perhaps sell almost all of their produce in the local markets. Despite the fluctuating prices, coffee production provides a considerable income to support farmers' livelihood.

The cultural realm of coffee is a fascinating subject characterized by certain similarities and differences among the three communities. The pouring of coffee on the ground before the consumption of the first round coffee is a common practice among the Kafecho and the Jimma Oromo. The practice is interpreted as thanking the land that yields coffee and other crops. In Kafa, this practice of pouring coffee (*coro*) is part of the *dejo-qollo* ritual involving offerings to the earth in honor of the god of harvest. In this context, coffee is used periodically to create relations with the supernatural. An ethnographic parallel to the *dejo-qollo* ritual

could be found among the Oromo of Jimma, where the pouring of coffee is part of the ritual before consumption of the beverage and food prepared from part of the new yield before the onset of harvesting crops. Coffee is also prepared and consumed during the *Ginbot-lidäta* ceremony, a feast prepared to remember the birth day of St. Marry (every May 8 among Christians) in Kafa and elsewhere in Ethiopia, a day on which Muslims in Jimma habitually prepare a feast in a compound or under a tree in a village where coffee ceremony features communal prayers. On the contrary, the role of *kari* in rituals is limited to only a section of the Majangir community living in Bench-Maji zone of Southern Nations, Nationalities and People's Region (SNNPR), and Godäre and Mängäshi districts in Gambela Regional State. In these areas, offerings in *kari* involve both pouring the infusion and charred coffee seedlings in reverence to *Doqtan,* a guardian spirit and *Rähawi*, a spirit that reveals itself sporadically.

The role of coffee in rituals is rather eloquent among the Jimma Oromo, who apart from regular coffee ceremonies, prepare the beverage during two important occasions other than the yearly feast before the onset of harvesting: holidays and trying times. Coffee is not just a beverage to be shared with neighbors but a means to daily supplicate and thank God (*Waaqa*). Traditional Oromo coffee ceremonies are often accompanied by the burning of incense and interspersing a very small portion of the meal to be served before drinking the first round coffee known as *awälä* among the Jimma Oromo in Gomma. Coffee's role in rituals is more pronounced in such trying times as agricultural failure, epidemic, drought and damaging rains. During these occasions, coffee can be prepared at home, within compounds, under shade of a tree or within a mosque compound where people gather and attend communal prayers aimed at pleading *Waaqa* for good harvest, the well-being of the people and nurturing rains. The overall purpose of coffee in Oromo rituals is to serve as a medium of appealing *Waaqa* to reverse difficult conditions and gratify Him for euphoric events. In this context, coffee can irrefutably be considered as a sacred plant employed as a ritual means to maintain the social order with the divine.

The use of coffee in Oromo rituals gets a further impetus in *bunä-qäla* (coffee slaughtering) ritual which involves the preparation and consumption of butter encrypted hulled coffee during such occasions as the *atete* ceremony(a female ritual invoked for the health and fertility of the woman), naming of a newly born child, and sacrifice for a deceased person. The *bunä-qäla* ritual survives in two important cultural realms of the Jimma Oromo in Gomma: the birth of a calf and the arrangement of marriage. In this context, it is a means of prayer and praising *Waaqa* for the birth of a new calf and an expression of good wishes for a

successful marriage. Since it is the female who slaughters coffee, the ritual is intertwined with diverse sexual metaphors representing woman, symbolizing human fertility, but also of cattle and sheep as well as the bursting open of seeds in plants. These uses of coffee in Oromo feasts and rituals as a substitute for blood would situate the plant between two extremes, the animal and the vegetable realms. Ethnographic parallels supporting this hypothesis could be found among the Gäri (see Getachew 1990) and historically documented among other Cushitic people, for example, the Konso and the Burgi (see Azais and Chambard 1931 cited in Pankhurst 1997:525). Inspite of that information from authorities in the area casts doubt on the existence of the tradition among the Konso in the past and confirms its inexistence in the present (Metasebia Bekele-staff member of Association for Conservation of Culture- Hawassa, pers. com. 23 May 2016). The use of coffee in feasts and rituals seems to have a strong environmental and cultural root, but the principal factors relating the use of the plant in rituals are associated with ideological reasons explained in the preceding paragraphs. The ethnoarchaeological data on the ritual values of the plant begs the question "was coffee exploited for religious reasons?"

The query stands as it is and I prefer to acknowledge the varied but complex nature of the motives behind plant domestication though coffee can be a candidate for ritual domestication. This ethnoarchaeological hypothesis rests up on the many rituals I documented associated to the consumption of the plant. The extent to which coffee is used in rituals among traditional communities in southwest Ethiopia is actually a good proof that initial domestication of the plant for ritual purposes is plausible. Furthermore, domestication has been usually considered for very basic purposes, basically eating. However, recent research suggests that ritual came before this. Thus, many authors (for example, Braidwood 1953; Dietrich *et al.* 2012: Hayden 1990; 2004; 2009; Hayden *et al.* 2013; Munro 1963) argue that a social beverage such as beer, which is employed in many rituals in pre-industrial societies, was actually prior to bread or porridge and that the main motive for cultivation might have been ritual. Given the negligible nutritional value of coffee, a ritual move for the domestication of the plant is rather eloquent. Thus, there are sound reasons to suggest that coffee could be playing the role of beer in other contexts and that the many rituals that I have recorded in southwest Ethiopia irrefutably uphold the hypothesis.

By way of conclusion, it should be noted, here, that the cultural range of Ethiopia is diverse for plausible analogical extrapolation to people living in distant times, places and contexts. In this perspective, the study of material culture associated with coffee production and consumption is hoped to help understand coffee

traditions in the systemic context and possible archaeological remains, and exploiting such understandings to inform archaeological concepts and improve interpretations. From technological standpoint, the formal property of artifacts can be used as an attribute for drawing analogies. For instance, what we know about the typology of materials used in the production and consumption of coffee in ethnographic context can be used to understand the archaeological parallels and the variation in time and space. This agrees with the purpose of analogical inference explained by Smith and Peregrine (2012:5). Therefore, the ethnographic materials documented in this ethnoarchaeological study can be used as a known source or analog based on which inferences could be made about the archaeological record relating materials involved in processing and consumption of coffee. Thus, to presuppose that we can simply project crystallized ethnographic information back in time is quite deceptive. Instead, our ethnographic knowledge on the cultivation and consumption of the plant needs to be contextualized historically.

Specific analogies that can be drawn from the pattern of data observed in this ethnoarchaeological study embrace social and technological factors. Despite the absence of archaeological evidence, early coffee cultivation methods and the resemblance between the current forest and semi-forest coffee cultivation systems in southwest Ethiopia rings true thereby hinting the technological and environmental context in which humans first tended, domesticated and cultivated the plant. Likewise, the central role of men during the onset of the exploitation and the domestication of the plant can be alluded from the current mode of exploitation of forest coffee and the cultivation of the crop in the field. From technological point of view, the use of archaic wooden agricultural implements (*horda, gomo, hoko and oko*) in the process of cultivating coffee evoke the possibility that these tools perhaps represent ancient agricultural implements employed in clearing land in the forest regions of southwest Ethiopia as people searched for new lands required to cultivate crops, chiefly coffee and expand settlements. For now, the evidence is not apparent archaeologically, but more archaeological excavations in the region, would no doubt add much to our understanding of the technologies employed in the cultivation and processing of the plant. The further use of the digging stick with pointed end (*horda*) among the Majangir in the exploitation of edible wild tubers is suggestive that it might have been employed by pre-agricultural communities for similar purposes.

One also needs to take into account the importance of itemizing shared attributes between the source or analog (i.e coffee and *kari* pots) with the unknown subject- the archaeological materials with which the analogs are compared. In drawing analogy between coffee pots and coffee related cultural practices,

considering shared attributes between the analog from ethnographic context and the archaeological subject in question is based on deductive inferences. Interpreting any archaeological data relating coffee and *kari* pots, if recovered in southwest Ethiopia, needs to take into account analogous subsistence technologies presented in this dissertation. The approach could be of better result in drawing parallel between the ethnographic cases presented in the dissertation and any unknown archaeological culture from the region. This accords with the purpose of direct historical analogy elaborated by different scholars (for instance, Ascher 1961; Lyman and O'Brien 2001; O'Brien and Lyman 1999; Willey 1953).

The study of coffee's history has not gone unaffected by current politics, pro-Kafecho movements emphasizing (reasserting) the origin and hence affinities with Kafa and its people, others asserting initial history of the plant to be related with the Oromo. These tendencies are evident in the efforts to establish a museum of coffee in their own respective alleged birthplaces of coffee. The regimented move to establish the link with the history of the origins and the first use of coffee is far from subscribing to notions that any one of the people growing and consuming the plant in Ethiopia might have had connection with the early history of the plant. I view the recent contention over the history of the first use of the plant as part of the processes to create a heritage with which the people associate themselves and bolster their pride in the midst of growing ethno-nationalism. Such claims made by any group can partly be attributed to the close historical ties between the plant and the socio-cultural and economic livelihood of the people professing the plant as a heritage and a contribution to the rest of the world.

Southwest Ethiopia is associated with the origin of *Coffea arabica* and the presence of the highest genetic diversity of this species is supported by genetic studies. On the other hand, creating a link between the history of the plant and a section of people in the region along ethnic lines is rather a beggaring description without the presence of a complete and orthodox version of the early history of the plant in the country. In the present context, however, the cumulative effect of the attempts made to heritagize coffee in southwest Ethiopia was the birth of a national museum of coffee at Bonga, Kafa. An overly enthusiastic adherence to either the Kafecho or the Oromo would overtly lead to a period of coffee wars. Notwithstanding these developments, such movements also offer the construction of agricultural heritage that propagate ideas of ethnic superiority and hegemony, which only obscure the real complexity and significance of coffee's connection with the rest of Africa and the world. Attempting to trace the first use of coffee back to a single

source is, thus, a subject difficult to explain. Considering *Coffea arabica* as a gift of Ethiopia to the rest of the world and an agricultural heritage of the country is a reasonably positive move than localized rivalries.

There is also a prospect for Ethiopia to produce coffee-leaf-tea to meet both local and international consumers who need a new healthy hot beverage option. This will help coffee farmers of the country to earn additional income from their coffee crop especially in times of price fall in local and international markets. Thus far, I have discussed the ethnoarchaeological evidence on the cultivation and consumption of coffee in southwest Ethiopia. Time will tell whether the chronology on the beginning of the consumption of coffee in the country is not spurious. It is now time for the archaeologist to set off a large-scale venture dealing with the antiquity of the plant.

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Annex I. Volume of Kafecho coffee pots (*bune-qondo*).

		Households	Volume(in liters)
Mankira, Decha	Arada-Gicha	AMD-01	2.875
		AMD-02	2.875
		AMD-03	2.25
		AMD-04	2.50
	Bahita	BAM-01	2.625
		BAM-02	0.875
		BAM-03	2.75
		BAM-04	2.8125
	äga	CMD-01	2.25
		CMD-02	0.875
		CMD-03	1.50
	C Bächa	BMD-01	1.75
		BMD-02	2.0
		BMD-03	1.75
	Gola	GMD-01	2.125
		GMD-02	2.50
		GMD-03	2.5625
	Yätita	YMD-01	3.75
		YMD-02	3.25
		YMD-03	2.625

Annex I. Volume of Kafecho coffee pots (*bune-qondo*).

Boqa, Adiyo	Mätära 01	MBA-01	2.50
		MBA-02	3.625
		MBA-03	3.25
		MBA-03	3.25
		MBA-04	3.25
	Qäja	KAA-01	4.334
		KAA-02	2.625
	Utära	UXA-01	4.334
		UXA 02	2.50
		UXA 03	4.0
		UXA-04	Iron can in use
Gimbo	Qäja-Araba	KRG-01	2.50
		KRG-02	2.75
		KRG-03	2.8334
		KRG-04	2.625
		KRG-05	2.75
	Kaya-Kelo	KKG-01	4.9375
		KKG-02	4.0
		KKG-03	2.60
		KKG-04	2.667
		KKG-05	3.875

Annex II. Volume of *kari* and coffee pots of the Majangir.

		Households	*Kebet-karionk*	*Kebet-sid'anonk*	Coffee pot(*jäbänoy*)
			Volume(in liters)		
Goji (in Addis Birhan), Yäki	Opa	OGM-01	4.5	2.50	3.5
		OGM-02	4.25	2.0	1.5
		OGM-03	3.75	1.70	2.0
		OGM-04	4.375	1.50	1.50
		OGM-05	3.25	1.0	2.70
		OGM-06	5.75	1.3	2.75
		OGM-07	5.75	1.75	3.125
		OGM-08	3.76	2.0	1.70
		OGM-09	3.875	3.0	1.8
		OGM-10	5.125	1.0	1.5
		OGM-11	3.875	1.375	2.625
	Meda	MGM-01	5.0	1.375	3.75
		MGM-02	6.0	1.50	3.0
		MGM-03	3.75	1.75	0.7
		MGM-04	5.5	2.25	2.0
		MGM-05	4.25	2.0	1.5
	Näwe	NGM-01	5.25	2.5	2.25
		NGM-02	4.125	1.5	2.75
		NGM-03	4.25	2.0	1.5
		NGM-04	4.50	3.0	2.25
		NGM-05	3.825	2.25	2.75
		NGM-06	4.25	3.0	1.75

Annex II. Volume of *kari* and coffee pots of the Majangir.

Goji (in Addis Birhan), Yäki	Näwe	NGM-07	3.125	3.5	1.5
		NGM-08	3.875	1.375	1.25
		NGM-09	4.25	1.25	1.75
		NGM-10	2.5	3.75	1
		NGM11	4.0	2.4	2
		NGM-12	4.5	2.3125	1.75
		NGM-13	2.5	4.75	1.5
		NGM-14	3.438	1.5	1.25
		NGM 15	4.25	1.50	1.75

Annex III. Volume of Oromo coffee pots in Gomma, Jimma.

		Households	Volume(in liters)
Coce-Lämi, Gomma	Mato	MCG-O1	2.35
		MCG-02	2.50
		MCG-03	0.75
		MCG-04	2.875
		MCG-05	2.125
		MCG-06	2.625
	Simibiro	SCG-01	2.75
		SCG-02	1.875
		SCG-03	3.25
		SCG-04	3.125
	Cale-tiqa	CCG-01	2.0
		CCG-02	1.875
		CCG-03	1.166
		CCG-04	.2.50
		CCG-05	1.03125
		CCG-06	2.125
	Nano - Mäsgida	NAG-01	2.125
	Cäfe-gäma	CAG-01	2.25
	Cale-Guda	GAG-01	1.875
		GAG-02	2.25
	Gio	GCG-01	1.75
		GCG-02	2.75

Annex III. Volume of Oromo coffee pots in Gomma, Jimma.

Coce-Lämi, Gomma	Gio	GCG-03	1.875
		GCG-04	2.125
		GCG-05	1.75
		GCG-06	1.75
		GCG-07	2.0
		GCG-08	2.25
		GCG-09	2.375
		GCG-10	2.50
	Bonsile	BAG-01	2.125
		BAG-02	2.25
		BAG-03	2.125
		BAG-04	2.50
		BAG-05	2.50
		BAG-06	1.75
		BAG-07	1.75
	Kusso	KCG-01	2.25
		KCG-02	2.50
		KCG-03	2.0

Annex IV. List of Informants

I. Kafecho

Ser.No.	Name	Sex	Age	Clan	Household
1	Dägu Gäbrämariyam Gawo	M	60	Kulo*	AMD-01
2	Alämitu Bäyänä Bulo	F	40	Gedo	
3	Asrat Gäzähagn Dimo	M	45	Galo	AMD-02
4	Almaz Täka Yebo	F	30	Ibo	
5	Mäkuria Yebo Shimo	M	30	Mänjo	AMD-03
6	Mäläche Hayile Gundo	F	25	Mänjo	
7	Qocito Alämu Tato	M	60	Guche Amaro	AMD-04
8	Mulunäsh Mäläsä Wäldäyäs	F	60	Yutimo	
9	Täsfanäsh Mahmud Abagojam	F	28	Galo	BAM-01
10	Tamiru Tadäsä Wäldäsänbät	M	45	Turo	
11	Bushimo Gäbräsadiq Sharo	M	50	Amaro	BAM-02
12	Asägädäch Bäqälä Barango	F	35	Amaro	
13	Sähay Wäldämariyam Wähachäw	F	25	Amaro	BAM-03
14	Atnafu Hayilägiyorgis Gibo	M	40	Tigäro	
15	Bälaynäsh Yebo Ado	F	31	Hiniqano	BAM-04
16	Qocito Gäbre Gibo	M	41	Argepo	
17	Wärqe Gäbre Gawo	F	40	Hatäro	CMD-01
18	Abafogi Ababulgu Abdulqadir	M	70	Abjädo	CMD-02
19	Amaräch Aränge Halim	F	50	Halim	
20	Tadäse Täsäma Läma	M	71	Hinimacho	CMD-03
21	Täwabäch Gindo Giki	F	52	Maceche	
22	Kero Aläsh Shagäro Kenito	M	19	Odo	BMD-01

* The Kulo are Omotic speaking ethnic group living in Southern Nations, Nationalities and People's Region (SNNPR).

23	Gäbanäsh Abeto Adaro	F	20	Mänjo	
24	Gäbrämariyam Garito Gindäbo	M	55	Mänjo	BMD-02
25	Tadäläch Täklo Ado	F	30	Mänjo	
26	Bäzabeh Wäldäsänbät Atto	M	57	Dijeno	BMD-03
27	Mulunäsh Wäldäsänbät Gindo	F	52	Bosho	
28	Yärbeto Selasse Gindo	M	30	Mänjo	YMD-01
29	Abäbäch Alämu Ayiti	F	20	Mänjo	
30	Abäbäch Gäbrämädhin Yebo	F	30	Manno	YMD-02
31	Wädajo Wäldägiyorgis Gindo	M	60	Manno	
32	Atumo Alato Marocho	M	30	Manno	YMD-03
33	Qocäche Qocito Gindo	F	25	Manno	
34	Bizunäsh Alämu Mäsqäl	F	50	Amaro	GMD-01
35	Gärämäw Gäbrämariyam Haro	M	70	Gedo	
36	Girma Lämma Wädajo	M	45	Amaro	GMD-02
37	Gäbäyanäsh Gäbrämariyam Gäbräyäs	F	40	Dugäche	
38	Gärämäw Dästa	M	40	Amaro	GMD-03
39	Gäzähagn Gäbräselasse Gäbre	M	32	Gedo	
40	Abiyot Sharito Shagito	M	28	Hindägäno	MBA-01
41	Askalä Ikalo Kapisho	F	28	Dugo	MBA-02
42	Mäsärät Mängistu Gäbre	F	22	Wäshäro	MBA-03
43	Kero Wädajo Wäldäselasse	M	28	Dugo	
44	Askale Gäbre Gawo	F	35	Dugo	MBA-04
45	Mängäsha Ero Marto	M	45	Mato	
46	Wärqenäsh Asäfa Wäldäsänbät	F	25	Mato	KAA-01
47	Askaläch Ibero Käbisho	F	45	Dugo	KAA-02
48	Wärqenäsh Qocito Gäbrämikael	M	30	Duto	UXA-01

49	Sahle Shäligo Yebo	M	36	Yuqo	
50	Etenäsh Miteto Wäldämikael	F	23	Kuto	UXA-02
51	Addisu Adäme Hayile	M	25	Yuqo	
52	Almaz Keto Shobo	F	35	Dugäche	UXA-03
53	Gäbräyäs Gaweto Geco	M	30	Yoto	
54	Täsfanäsh Hayilu	F	23	Manno	UXA 04
55	Adnäw Gingäsho Qesho	M	27	Manno	
56	Abäbäch Wäldämariyam Dämäqä	F	50	Waeche	KRG-01
57	Adäm Gäbrämariyam Hayile	M	55	Amaro	
58	Asäläfäch Asäfa Gäbre	F	55	Gedäche	KRG-02
59	Tafäsä Gäbrätsadiq Ambo	M	45	Aremo	
60	Askale Wäldämikael Gäbrämariyam	F	40	Amaro	KRG-03
61	Berhanu Wäldämikael Ado	M	50	Duguyo	
62	Worqe Gäbrämariyam Wäldägabrel	F	40	Amaro	KRG-04
63	Alämu Wäldäselasse Ado	M	50	Gurabo	
64	Zäläqä Tadäsä Afäwärq	M	55	Dawro	KRG-05
65	Aster Wäldämariyam Hayile	F	40	Haneto	
66	Askale Imo Gawo	F	45	Koyjeche	KKG-01
67	Mälaku Mamo Gäbräyäs	M	50	Koysho	
68	Almaz Habtämikael Cechito	F	40	Argepo	
69	Gäbabo Gäbrämikael Keto	M	45	Dingero	KKG-02
70	Askale Gäbre Wono	F	50	Amaräche	KKG-03

71	Qocito Wäldämariyam Yebo	M	40	Dijeno	
72	Tigist Mäkuria Wäldäsänbät	F	25	Waho	KKG-04
73	Ashagre Atumo Nälo	M	30	Wäbäsho	
74	Wärqe Gäbrämariyam Mäkuriya	F	50	Amaro	KKG-05
75	Gäbrämariyam Keto Mäshäno	M	60	Gurabo	

Potters

Ser.No.	Name	Age	Clan
1	Mamite Selasse Yebo	40	Manno
2	Abäbäch Gäbrämädhin Yebo	30	Manno
3	Abaynäsh Alämu Ayäto	35	Manno
4	Alämitu Dämbo Dächassa	40	Mänjo
5	Amete Galo Kero	48	Mänjo
6	Wäläte Woldämariyam Dämbo	50	Mänjo
7	Capeche Chaki Mageto	35	Mänjo
8	Arägash Ejigu Iribo	20	Mäniyo
10	Ejigayähu Ejigu Iribo	43	Mäniyo
11	Azaläch Sariqo Sälqe	35	Mäniyo
12	Almazäch Meshamo Mamo	25	Mäniyo

II. Majangir

Ser.No.	Full name	Sex	Age	Clan	Household
1	Tinbit Gurca Shosha	F	38	Dane	OGM-1
2	Markos Gofu Kanens	M	47	Binir	

3	Dima Bune Fälti	F	42	Melankay	OGM-02
4	Mäkonen Mäbrate Shubi	M	47	Kabulen	
5	Ngonarti Hayle Sanqa	F	65	Kabulenkay	OGM-03
6	Simon Mute Engliz	M	22	Gariyen	OGM-04
7	Siyon Shamee Bilen	F	18	Kabulenkay	
8	Tias Ţama	F	45	Melankay	OGM-05
9	Ayäläch Bälachäw Shankoy	F	50	Dawarenkay	OGM-06
10	Ninawit Denkee Tulu	F	23	Gid'enkay	OGM-07
11	Zäyinäba Bileen Kod'i	F	75	Kabulenkay	OGM-08
12	Hana Mulugeta Burbe	F	18	Bajenkay	OGM-09
13	Sämärwa Baydi Felti	F	40	Melankay	OGM-10
14	Aster Senosi Dosse	F	29	Gariyenkay	OGM-11
15	Mariyam Yohannes Gomee	F	35	Kawtenkay	MGM-01
16	Mihret Mäkuria Peinki	F	65	Gid'enkay	MGM-02
17	Tinigis Windirke Kore	F	30	Asenkay	NGM-01
18	Tinbit Geedu Bäyänä	F	35	Dawrenkay	NGM-02
19	Tadäläch Bäqälä Manteen	F	22	Kabulenkay	NGM-03
20	Mapisa Shamee Bileen	F	23	Kabulenkay	NGM-04
21	Hana Därme Mäkuriya	F	23	Gid'enkay	NGM-05
22	Epeel Mäkonen Mäbrate	F	20	Kabulenkay	NGM-06
23	Dämäl Täsfaye Zäläqa	M	27	Melan	

24	Sara Paulos Dämäqä	F	15	Melankay	NGM-07
25	Ismael Bäzabeh Gefi	M	25	Kolen	
26	Aster Tingäri Shubi	F	30	Kabulenkay	NGM-08
27	Luqas Narma Fidee	M	37	Melan	
28	Mitike Bersay Yawshe	F	60	Sasenkay	NGM-09
29	Aster Narme Fidee	F	28	Melankay	NGM-10
30	Yohannis Narma Fidee	M	25	Melan	NGM-11
31	Enata Alämu Endäshaw	F	17	Kolenkay	NGM-12
32	Miriam Isiyaq Pikaa	F	40	Biniyankey	NGM-13
31	Hana Asäfa Dubale	F	20	Dawarenkay	NGM-14
32	Ayälä Dämäqä Dämbi	M	25	Melan	
33	Aster Mamo Wolde	F	25	Sasenkay	NGM-15
34	Mariyam Yohannes Gomee	F	35	Kewtenkay	MGM-01
35	Mihret Mäkuriya Peinki	F	65	Gid'enkay	MGM-02
36	Bälaynäsh Shaeo Tolori	F	36	Dawarenkay	MGM-03
37	Bersael Dosse Siqäbäb	F	31	Gariyenkay	MGM-04

Potters

	Name	Age	Clan
1	Hana Ţonchol Baykin	50	Melankay
2	Zänäbäch Keki Melän	55	Melankay

3	Tinbit Yada Gärbi	40	Kolenkay
4	Ngiyonarti Haile Sanqa	65	Kabulenkay
5	Hana Mulugeta Burbe	18	Bajenkay
6	Ayäläch Bälachäw Sanakoy	50	Gariyenkay
7	Mariyam Yohannes Gomee	40	Kawtenkay
8	Mimi Mäkonen Mäbrate	15	Kabulenkay
9	Bälaynäsh Shawo Tolori	36	Dawarenkay
10	Tinigis Windirke Koree	30	Asenkay
11	Sael Yohannes Bazen	26	Falenkay
12	Dina Zäläläw Sisay	28	Kolenkay
13	Bersael Dosse Siqäbäb	31	Gariyenkay
14	Tias Ţama Fanayin	38	Melankay
15	Almaz Wälde Shubi	55	Gorsekenkay

III. Oromo

Ser.No	Full name	Sex	Age	Clan	Household
1	Asädä Wäldägiyorgis	F	70	Dawro†	MCG-01
2	Abära Täshalä Dolango	M	55	Dawro	MCG-02
3	Jäbära Abära Abay	M	32	Dawro	MCG-03
4	Tadälu Täsfaye Mängistu	F	25	Kulo	
5	Näbso Abamiliki Abagibe	M	51	Boräna	MCG-04
6	Shito Abalulesa Abawari	M	45	Sädächä	
7	Kälifa Umer Abawaji	M	39	Abukako	MCG-05
8	Halima Lägäsä Shifa	F	28	Qaqa	
9	Säman Abajobir Abasimbo	M	57	Qaqa	MCG-06
10	Umi Abajäbäl Abdulqafi	F	35	Ashräf	
11	Gämächu Tufa Iräna	M	68	Jida	SCG-01
12	Käbäbush Wäbälo	F	45	Dawro	
13	Taju Diga Duraso	F	45	Bunno	SCG-02
14	Fädila Abajiyad Abarago	F	30	Mamädi	SCG-03
15	Tadässe Tärfase Alämu	M	70	Minganango	
16	Tadäläch Mäshäsha Hayilu	F	40	Nono	SCG-04
17	Mäkonen Qäno Aschaläw	M	60	Mäcca	
18	Hussen Abamäccа Haji	M	35	Säpera	CCG-01
19	Had'äbiya Abafogi Abagole	M	55	Busase	
20	Bulcha Abafiţa Abasimbo	M	32	Jida	CCG-02
21	Had'anega Abafiţa Abasimbo	M	60	Inoqilo	

† The Dawro, like the Kulo, are a separate ethnic group belonging to Omotic speaking people living in SNNPR.

22	Mohammed Abasimbo Abawaji	M	45	Qaqa	CCG-03
23	Zäyida Shärif Siraj	F	35	Sädächa	
24	Jäbäl Abajobir Abamire	M	40	Wänjärasi	CCG-04
25	Zämzäm Abagojam Ababora	F	50	Mäcca	
26	Kämila Abawaji Ababora	F	40	Babeyu	CCG-05
27	Fate Abamäcca Abamilki	F	36	Dägoye	CCG-06
28	Mohammed Säyid Ali	M	40	Wollo	
29	Indiya Sultan Abadega	F	36	Babeyu	NAG-01
30	Sultan Abadega Abawaji	M	40	Qaqa	
31	Had'ädenu Abagojam Abasimäl	M	70	Yoqo	CAG-01
32	Had'äbiya Ababiya Abadilbi	F	70	Alga'a	GAG-01
33	Kämäru Ababiya Abadilbi	F	30	Shärif	GAG-02
34	Misko Yimam Abaware	F	40	Busase	GCG-01
35	Hussen Abamäcca Abad'ase	M	75	Babeyo	GCG-02
36	Wärjiti Abadiqa Abaqoyas	M	55	Wärji	GCG-03
37	Indiya Abadiqa Abafoge	F	40	Busase	GCG-04
38	Täfära Abaqono Abagibe Abawaji	M	40	Jarso	GCG-05
39	Abaqono Abagibe Abawaji	M	55	Busase	
40	Had'ämäshir Abadura Abasimbo	F	50	Busase	GCG-06
41	Nasser Abajiru Abasimbo	M	58	Busase	GCG-07
42	Käzira Aba-ali Sheikmohammed	F	30	Wänjärasi	
43	Kämal Abarago Abagisa	M	30	Jiruu	GCG-08
44	Misku Kädir Abalenco	F	25	Awäläni	
45	Aisha Abdäla Sharka	F	15	Yäma	GCG-09
46	Kälifa Kädir Abagoje	M	25	Wänjärasi	

47	Abära Minota Gälo	M	60	Dawro	GCG-10
48	Mulatu Bäqälä Balo	F	50	Dawro	
49	Had'äshärif Abamäccа Abagole	F	50	Lalo	BAG-01
50	Jämila Hassen Abamäccа	F	30	Hagälo	BAG-02
51	Ligdi Abamäccа Abadilbi	M	40	Jarso	
52	Muktar Sheikh Mustäfa Abawari	M	35	Sädächä-roda	BAG-03
53	Fatuma Muktar Sheikh Mustäfa	F	25	Gänji	
54	Märdiya Abajihad Abadiga	F	40	Wacho	BAG-04
55	Abawäli Abafita Abamärga	M	90	Leqa	
56	Bädru Abamäccа Abawari	M	45	Sädächä-roda	BAG-05
57	Miftu Mohammed	F	33	Gida	
58	Abasälam Hafte D'aba	M	45	Boräna	BAG-06
59	Aman Romana Abadura	F	40	Telqo	
60	Siraj Abawäli Endändo	M	65	Boräna	BAG-07
61	Had'ämälik Abadiga Abagäro	F	50	Qaqa	
62	Fatuma Abasimäl Ababilo	F	42	Busase	KCG-01
63	Hussen Abamäccа Abadilbi Abaereso	M	32	Jarso	KCG-02
64	Käbäbush Mängäsha Bune	F	50	Gida	KCG-03

EXTENDED ABSTRACT

Coffea arabica, which still grows wild in the forests of the southwestern highlands of Ethiopia, is the oldest known species of coffee to be cultivated for its berries and is, quintessentially, one of the plants indigenous to the country. The thesis presents different traditions of coffee cultivation and consumption among people living in southwestern part of the country, the Kafecho, the Majangir and the Jimma Oromo. Whereas historical accounts that provide first-hand information on the early cultivation and consumption of the plant in southerm half of Ethiopia are rare, the subject has recieved little or no archaeological examination. Consequently, both direct and circumstantial archaeological signatures pertaining to the the plant have not yet come to the fore. On the other hand, such spheres of modernization as urbanization, access to industrial products, added with the accompanying changes in the agricultural system have, in part, transformed ways of life of people in different parts of the country. These changes are, thus, alluring to investigate methods in traditional cultivation of coffee, the consumption of the beverage on one hand, and the *chaîne opératoires* in the production of crafts and behavior in systemic context that eventually result in the archaeological site formation on the other.

The study employed systematic problem-oriented ethnoarchaeological research methods and archaeological techniques of recording sites, artifacts, structures and features. Questions related to the production and the consumption of coffee were partly addressed through ethnoarchaeological techniques involving mapping of compounds and activity areas, documenting material culture and household interviews, whereas detailed information on the agronomy of coffee, the technology and the socio-cultural contexts of the production and the consumption of the beverage was obtained via participant observation. Consequently, the study has generated important theoretical and methodological insights to an array of archaeological enquiries relating pathways in the onset of domestication and cultivation of the plant, and the cultural and environmental context in which artifactual evidence could be recovered archaeologically.

The four principal types of coffee production systems known in Ethiopia, forest-coffee, semi-forest coffee, garden-coffee and plantation-coffee, are found in two major coffee growing agro-ecological zones of the study area, *qolla* (the hot regions) and *wäyna däga* (the temperate regions). Even then, there is variability in the type of coffee cultivation system practiced by farmers of the region. While the Kafecho produce coffee through the three traditional coffee cultivation systems (forest-coffee, semi-forest coffee and garden-coffee), the Majangir in the environs of Teppi, and the Jimma Oromo at Coce-Lämi (Cocee-Lamii) in the district of Gomma, depend on garden-coffee cultivation system alone. Plantation-coffee, a large scale modern type of coffee production, is represented in all parts of the study areas although the total share of this cultivation system is relatively minimal both in terms of total land under cultivation and yield. While farmers habitually propagate self-sown seedlings in spacious parts in coffee farms under

the traditional cultivation system, the magnitude of reliance on such seedlings in garden-coffee is particularly pronounced among the Majangir.

In relative terms, the degree of human involvement in the natural growth and reproduction of coffee is high in garden-coffee cultivation system, where farmers periodically engage in mulching, hand-weeding and hoeing at a nursery stage, and weeding, hoeing, slashing and pruning after seedlings are transferred to coffee farms. Conversely, there is a very minimal human intervention in forest and semi-forest coffee cultivation systems in which case farmers mainly slash the undergrowth to allow proper growth of coffee trees and movement within the trees, and to avoid competition between coffee trees and tree climbers. The fact that more yield comes from garden coffee than semi-forest and forest-coffee is attributable to the corresponding variations in the degree of human involvement in the natural growth and reproduction of the plant.

From the point of view of technology, both industrial and traditional implements are used from the preparation of seedlings to the harvesting stage. The eye-hoe (*zabia*) and the mattock are two commonly utilized industrial agricultural digging implements used in preparing nursery sites and working in coffee farms, while the machete, known as *gäjäro* (*gajaroo*)*, jame* (*jaamee*) and *gäjära* (*gajaraa*) among the Kafecho, the Majangir and the Oromo correspondingly, is an iconic slashing implement used in coffee growing regions of Ethiopia. Likewise, the digging stick, known as *gässo*, is a composite digging implement comprising a metal sheath attached to a wooden shaft. It is used in preparation of holes for coffee seedlings, and particularly preferable for deep penetrations into solid soils. A wholly wooden digging tool with pointed end, *horda* (*hordaa*)*,* is still in use among the Majangir chiefly to prepare seedling holes and is efficient on softer soild and wetter environmental conditions. A hallmark to coffee cultivation in Kafa is the production and use of *kotero* (*koteroo*), a composite digging implement consisting a sharp metal sheath socketed into a naturally bent wooden handle used in hoeing coffee seedlings.The Majangir and the Oromo of Jimma, who lack this technology employ the mattock for the same activity. In stark contrast, the *hoko* (*hokoo*) of the Kafecho and *oko* (*okoo*) of the Oromo are two stylistically and functionally identical wooden implements used by a single man to bend weeds and the undergrowth while slashing coffee farms with machete and to heave weeds from cleared coffee fields. A rather long wooden implement of similar function is the *gomo* (*gomoo*) of the Kafecho used to bend bigger scrubs by one man, while another man simultaneously does the slashing with a machete. Interestingly, the four traditional wooden implements (*horda*, *hoko, oko and gomo*) hark back to primitive pre-agricultural and early agricultural technologies employed in exploitation of wild resources and expansion of agricultural fields and settlements. This is also true for hand woven baskets: *kofo* (*kofoo*) of the Kafecho, *kante*(*kaantee*) of the Majangir and *tä'e* (*ta'ee*) of the Jimma Oromo and trays used during harvesting and wooden coffee drying-racks are among ancient tools employed in transporting and processing vegetables and probably go back to the time of foraging.

The presence of the three traditional coffee cultivation systems in southwest Ethiopia provides an ideal context to witness the way humans exploit forest-coffee and propagate seedlings to garden-coffee, which in it self, can serve as a window to the past relation between humans and the plant resulting in the gradual domestication and cultivation of the plant. Regrettably, there is no reliable evidence of the presence of conspicuous ancient coffee fields with either hill side terracing or irrigation channels. But the occurrence of ridge and furrow pattern in hilly parts of garden-coffee in Gomma and apparently in Kafa may have remarkable significant archaeological implications, since ridge and furrow topographies are known to be very ancient and can survive for a very long time, provided that such farms are not ploughed again.This has been demonstrated in other contexts, such as Medieval Britain or the Precolumbian Andes. It is, thus, possible to find such archaeological evidence in abandoned ancient coffee fields where no modification has taken place since then.

The study also demonstrates the presence of certain degree of similarities in the preparation and consumption of coffee among the three communities in southwest Ethiopia. While the Kafecho and the Oromo brew and consume coffee prepared from the beans, the Majangir primarily rely on *kari* (*kaarii*), an infusion prepared from scorched coffee leaves mixed with a variety of spices. From a technological point of view, the coffee ceremony involves the use of pottery products (the coffee pot and the coffee roasting-griddle), wooden tools (the mortar and the pestle, and the coffee tray) and industrial coffee cups. The use of bamboo-made coffee cups, *tinjano* (*tinjaano*) and calabsh-made coffee cups, *qulu* (*quluu*) constitute two other typical cultural materials used by the Kafecho and the Jimma Oromo. Instead, the Majangir use two bowl-shaped *kari* pots, *kebet-karionk* (*kebet-kaarioonk*) and *kebet-sid'anonk* (*kebet-sidhaanoonk*),for boiling and distilling the infusion while they use clay-made *kari* cups known as *mätägoy* (*matagooy)* at the consumption stage. At the same time, they use *sote* (*sotee*)-a hand-woven *kari* filter and *gote* (*gotee)*- a calabash laddle at the distillation stage. The way present-day Majangir communities prepare and consume *kari* and the pristiness of their traditional technology and the *chaîne opératoire* involved in the process of preparation of the infusion is redolent of the traditions of an early agricultural society. Proof of this is, for instance, the fact that they use a fiber filter which is identical to the one used for distilling beer. It seems that the Majangir are applying to the context of coffee the technical procedures belonging to an earlier social beverage.

Since preparing coffee is considered as a quality of a good woman, the gender relations constructed through coffee preparation and consumption is one of a subaltern status for the woman, who should serve men during the coffee ceremony. The social impact of its consumption is profound whether we emphasize its role in buttressing relations of solidarity between neighbors and its ritual values, or in creating a sense of otherness and consolidating marginalization on the other, in relation to those who are excluded of the coffee ceremony or consumption groups. We can say that coffee consumption serves to delimit the group, who belongs and who does not (i.e. foreigners, marginalized groups). Notwithstanding the economic value of the cultivation of coffee, the role of the beverage in

such events as reconciliation, communal works organized during ploughing and harvesting seasons and during post-funeral gatherings is a common feature among the Kafecho, the Majangir and the Oromo. A major difference in the cultural dimension of coffee among the diverse groups is the extent to which it is used in rituals. Whereas the advent of Christianity led to the vanishing role of the coffee plant and *kari* in rituals among the Majangir, the Kafecho and the Oromo, despite the adoption of Christianity and Islam, have continued to use coffee in different kinds of rituals. This is reflected in daily rites accompanying the coffee ceremony and rituals during special occasions. *Coro* (*coroo*), the practice of pouring coffee on the ground, is considered a way of thanking the land that yields coffee and is carried out both during regular coffee ceremonies and as part of the *dejo* (*dejoo*) -offerings given to the earth as an expression of respect for the god of harvest, *qollo* (*qolloo*). Among the Jimma Oromo, the coffee ceremony not only features daily prayers and blessings, but it is a requirement in special occasions as a means of appeasing the creator (*waaqa*) for forgiveness, good harvest, health and good weather. At the same time, the preparation and the consumption of *bunä-qäla* (*buna-qalaa*), butter-embedded roasted, hulled coffee still plays a substantial role in Oromo feasts and ceremonies. The *bunä-qäla* tradition, preserved to date hints perhaps at links with a pastoral and an egalitarian ethos and the roots of this tradition could reasonably be traceable to the period before the Oromo expansion in the sixteenth century. Piecing together the ethnoarchaeological data on the ritual values of coffee among the Kafecho and the Oromo, it is possible to hypothesise that the prime motive behind initial domestication of the plant, unlike other food crops, could be related to ritual needs.

Another, and new, dimension of the cultural value of coffee is heritage. Interestingly, coffee is not only a lubricant of socio-cultural activities and a source of income, but has now emerged as an agricultural heritage amid ethnic rivalary between the Kafecho and the Oromo over historical ties to its origins and early cultivation. Despite the independent moves by regional authorieties to monumentalize the plant, the birth of a National Museum of Coffee in Kafa remains symbolic for a country considered as the origin of *Coffea arabica* and it is a testimony of its entering global modernity.

The consumption of coffee involves the use of different earthenwares produced by potters. Akin to several groups in the highland parts of Ethiopia, pottery among the Kafecho, the Majangir and the Oromo is an exclusively women's specialization. Among the Kafecho and the Oromo, potters belong to the lower stratum of the society in which men seldom support women in quarrying clay and digging firing pits. In Kafa, the role of men in pottery production is characterized by a marked clan variation. For instance, Mäniyo (Maniyoo) men have a rather meaningful role compared to Mänjo (Manjoo) and Manno (Maannoo) men as they not only quarry clay, but also fire pots and transport and sell pottery products. Majang potters, unlike their Kafecho and Oromo counterparts, live in an egalitarian society characterized by absence of class or clan marginalization. Majang men have a rather negligible role in pottery production despite their rare involvement in digging firing pits, a task that does not demand a high level expertise and regular engagement.

Potters in southwest Ethiopia produce hand-built, sun-dried, low-fired and unglazed coffee and *kari* pots. Potters select and quarry moldable clay and transport them using sacks or old baskets employed during the harvesting of coffee. All group of potters excepting the Majangir prepare paste with a mix of tempering material, chiefly straw. There are, of course, evident technological and technical differences in paste preparation. In this context, the use of a wooden log and a flat stone to pound clay and mix it with water and straw is almost the rule among Mänjo and Manno potters of Kafa and Oromo potters near the town of Agaro in Jimma zone , whereas pounding clay with a wooden log takes place on the ground among the Maniyo in Kafa and Oromized Yäma in Jimma. Battering paste with the feet is a technique distinctive of some Oromized Yäma potters. Unlike the others, Majang potters use a wooden log to pound and smooth clay in wooden barrels called *gonee.*

Ethnographic observations on pottery production in southwest Ethiopia also point at the presence of a marked association between the use of turning devices and the techniques employed in molding coffee-related pots, despite conspicuous variations among potters of the region. Again, Majang potters are the only artisans who entirely produce coffee-related pots on turning devices. The existing disparity in the *chaîne opératoires* of the production of coffee and *kari*-related pots are attributable to such principal factors as morphological differences of pots and techniques applied in the entire stages of production. The accompanying discrepancies in the time required to produce a pot is ascribable to two fundamental factors: size of pots and the presence or absence of decorative motifs. From a typological point of view, incision is typical on coffee and *kari* pots produced by Kafecho, Oromo and Majang potters. Whereas the production of plain coffee pots is not uncommon among Mänjo and Manno potters in Kafa, two decoration techniques, rippling and incision, are used to by the Mäniyo in Kafa and the Oromized Yäma in Jimma. Strikingly, Oromized Yäma potters produce coffee pots with double handles and double spouts for ritual reasons. On the other hand, the production of spoutless coffee pots in southwestern and northern Ethiopia is, putatively, attributed to the longstanding contacts along the Sudanese plains and the valleys of the Nile and its tributaries. Likewise, the use of roulette-decoration on globular *kari* pots among the Majangir can be related to the Iron Age tradition documented in South Sudan and Gambela. In the latter region, the site of Ajilak has yielded roulette-decorated pots in a context radiocarbon-dated to 1000-1200 AD. This kind of decoration is absent among the groups of the Ethiopian plateau, such as the Oromo and the Kafecho, and has to be associated with communities of Nilotic stock for the last two millennia at least.

Coffee-related pottery might be discarded in activity areas, and in the process become primary refuse or may be transported from the activity areas with other items, and form secondary refuse. Once a coffee-related pot in a systemic context is broken, it may lose its primary use and the likelihood of its reuse in a secondary context largely depends on the part affected during breakage and the economic status of a household. The ethnoarchaeological study on site formation processes of coffee-related pots shows the presence of a direct link between the diversity of

pots used in coffee preparation and consumption and the quantity of refuse that could be recovered archaeologically. Potsherds from coffee-related pots occur in large number among the Majangir, Kafecho and Oromo settled villages respectively. There does not seem to be particular patterns depending on the group except for one case: the high rate of breakage of *kari* pots is attributed to thermal stress caused by poor thermal shock resistance due to zero temper concentration, frequency of use and lengthy hours spent during the boiling of three or more rounds of the beverage twice or thrice a day. Given the poor preservation conditions of coffee beans in wet open environments of southwest Ethiopia, the prospect of uncovering technological evidence that could furnish insights on early coffee cultivation and consumption largely depends on the possibility of finding charred seeds and the scale of archaeological research in midden sites and abandoned settlements in southwest Ethiopia or even to the areas east of the Rift Valley.

RESUMEN AMPLIADO

Coffea arabica, que todavía crece de forma salvaje en las tierras altas del sudoeste de Etiopía, es la especie de café más antigua en haber sido cultivada y es una de las plantas indígenas más importantes del país. Esta tesis analiza diferentes tradiciones de cultivo y consumo del café entre comunidades que viven el sudoeste del país: los Kafecho, Majangir y Oromo de Jimma. Al mismo tiempo que las narraciones históricas que proporcionan información de primera mano sobre el cultivo y el consumo de la planta son muy escasas, el tema no ha recibido apenas atención por parte de la arqueología y la antropología. Así pues, las trazas directas o circunstanciales relacionadas con el uso de la planta no han sido todavía documentadas. Por otro lado, determinados fenómenos como la modernización y la urbanización y el acceso a los productos industriales, añadido a los cambios en paralelo del sistema agrícola han comenzado a transformar los modos de vida de las comunidades en distintas partes del país. Estos cambios incitan, por lo tanto, a investigar los métodos de cultivo tradicional del café, el contexto social de consumo de las bebidas y las *chaîne opératoires* de las tecnologías y artesanados relacionados con el cultivo y consumo del café en contexto sistémico, todo lo cual puede ayudar a comprender mejor el registro arqueológico y su formación.

Este estudio ha empleado métodos de investigación etnoarqueológicos sistemáticos y orientados a problemas, así como técnicas arqueológicas para registrar sitios, artefactos, estructuras y otros elementos materiales. Las cuestiones relacionadas con la producción y el consumo de café han podido ser solucionadas en parte gracias al levantamiento planimétrico de conjuntos de habitación y áreas de actividad, la documentación de la cultura material y las entrevistas en los conjuntos domésticos, mientras que la información detallada sobre la agronomía del café, la tecnología y el contexto sociocultural de producción y consumo de la bebida se obtuvo mediante la observación participante. Así pues, el estudio ha ofrecido nuevas visiones teóricas y metodológicas sobre una serie de cuestiones arqueológicas relacionadas con el origen de la documentación y cultivo de la planta y a su contexto cultural y medioambiental, en los cuales es susceptible de encontrarse trazas arqueológicas de su uso.

Los cuatro tipos principales de producción de café conocidos en Etiopía—el café de bosque, el café de semibosque, el café de huerta y el café de plantación—se encuentran en dos zonas agroecológicas principales de la zona de estudio, *qolla* (regiones cálidas) y *wäyna däga* (zonas templadas). Existe una gran variabilidad respecto al tipo de cultivo de café practicado por los agricultores en la región. Mientras que los Kafecho producen café a través de los tres sistemas tradiciones de cultivo del café (bosque, semibosque y huerto), los Majangir del entorno de Teppi y los Oromo de Jimma en Coce-Lämi (Cocee-Lamii) en el distrito de Gomma, dependen exclusivamente del sistema de cultivo de huerto. El café de plantación, un sistema moderna de producción cafetalera, está representado en todas las zonas del área de estudio, aunque el porcentaje que representa esta modalidad de cultivo es relativamente poco importante en términos absolutos de superficie de tierra cultiva y cantidad de producción. Aunque todos los

agricultores habitualmente dispersan las semillas de forma espaciada para que broten espontáneamente en los huertos de café en el sistema tradicional de cultivo, la dependencia de este sistema de siembra es particularmente clara en el caso de los Majangir.

En términos relativos, el grado de participación humana en el crecimiento natural y reproducción del café es muy elevado en el sistema de cultivo de huerto, en el cual los agricultores llevan a cabo periódicamente acciones como cubrir el suelo con mantillo orgánico, arrancar malas hierbas y escardar durante la fase inicial, y desherbar, desbrozar, escardar y podar una vez que los brotes han sido transferidos a las granjas de café. En cambio, la intervención humana es mínima en el caso del cultivo de café de bosque o semibosque. En este caso, los agricultores simplemente desbrozan la vegetación bajo los árboles para permitir el crecimiento adecuado de las plantas de café, facilitar el movimiento bajo los árboles y evitar la competición entre los cafetos y las plantas trepadoras. El hecho de que la producción sea más elevada en el cultivo de huerto que en el de bosque o semibosque se debe a un mayor grado de intervención humana en el crecimiento y reproducción naturales de la planta.

Desde el punto de vista de la tecnología, se usan tanto instrumentos industriales como tradicionales en la preparación de plantones durante la fase de cosecha. La azada (*zabia*) y el azadón son dos herramientas industriales que se utilizan habitualmente para cavar en la preparación de viveros y para trabajar en las granjas de café, mientras que el machete, conocido como *gäjäro* (*gajaroo*)*, jame* (*jaamee*) and *gäjära* (*gajaraa*) entre los Kafecho, Majangir y Oromo respectivamente, es un elemento de desbroce icónico en las regiones cafeteras de Etiopía. El palo cavador, conocido como *gässo*, está formado por un palo de madera al que se le añade una vaina metálica en la punta. Se utiliza en la preparación de hoyos para los plantones de café y resulta particularmente adecuado para penetrar los suelos más duros. Existe además un instrumento completamente de madera con un extremo puntiagudo, conocido como *horda* (*hordaa*)*,* y que está aun en uso entre los Majangir, sobre todo para preparar los hoyos para los plantones y es muy eficiente en suelos más blandos y revueltos. Un elemento característico del cultivo de café en Kafa es la producción y uso de *kotero* (*koteroo*), una herramienta compuesta por un mango de madera acodado realizado con una madera de dicha forma y un lámina de hierro con cubo para encajar en la madera. Los Majangir y los Oromo de Jimma, que carecen de esta tecnología, emplean una azada en su lugar. El *hoko* (*hokoo*) de los Kafecho y el *oko* (*okoo*) de los Oromo son dos útiles de madera estilística y funcionalmente idénticos usados para doblar las malas hierbas y la vegetación mientras se desbroza con machete, así como para arrastrar la maleza de los campos de café desbrozados. Una herramienta de madera particularmente larga y de función similar es el *gomo* (*gomoo*) de los Kafecho que se usa para doblar arbustos de mayor tamaño , mientras otra persona desbroza simultáneamente utilizando un machete. Es importante señalar que los cuatro instrumentos tradicionales de madera (*horda*, *hoko, oko and gomo*) se retrotraen a los tiempos previos a la

agricultura o al inicio de las actividades agrícolas. Lo mismo se puede decir de las cestas tejidas a mano: *kofo* (*kofoo*) de los Kafecho, *kante*(*kaantee*) de los Majangir y *tä'e* (*ta'ee*) de los Jimma Oromo, que son muy similares a las cestas expeditivas utilizadas por los cazadores recolectores para transportar la caza y las plantas recolectadas. Un origen muy remoto se puede aventurar también para las bandejas de cestería utilizadas durante la cosecha del café y las plataformas de secado del café, que posiblemente no hayan variado mucho respecto a los útiles empleados en el procesado de plantas recolectadas antes del inicio de la agricultura.

La presencia de tres sistemas tradicionales de cultivo en el sudoeste de Etiopía proporciona un contexto ideal para documentar la forma en que los humanos explotan el café de bosque y transportan las semillas a los huertos, lo cual en sí mismo puede servir como una ventana hacia el pasado que nos permita comprender la relación entre humanos y plantas que acabó resultando en la domesticación gradual y el cultivo de la planta. Desgraciadamente carecemos de pruebas fiables de la existencia de antiguos campos de cultivo de café caracterizados por aterrazamientos de colinas y canales de irrigación. Sin embargo, la ocurrencia de patrones de caballones y surcos en las zonas montañosas de Gomma y aparentemente Kafa podría tener visibilidad arqueológica, dado que este tipo de topografías agrícolas se sabe que son muy antiguas y pueden sobrevivir largo tiempo—siempre y cuando los campos de cultivos no se vuelvan a arar. Esto se ha comprobado en las Islas Británicas en épcoa medieval y en los Andes precolombinos. Resulta, por lo tanto, posible, encontrar prueba arqueológicas de campos de cultivo de café abandonados que no han sido modificados desde que se usaron originalmente.

Este estudio también demuestra la existencia de un cierto grado de similitud en la preparación y consumo de café entre las tres comunidades estudiadas del sudoeste de Etiopía. Mientras que los Kafecho y los Oromo preparan una infusión a partir de los granos de café, los Majangir utilizan de forma mayoritaria el *kari* (*kaarii*), una infusión realizada a partir de hojas de cafeto torradas y mezcladas con una variedad de especias. Desde un punto de vista tecnológico, la ceremonia del café, en cualquiera de los casos, implica la utilización de distintos elementos de cerámica (la cafetera, la plancha para tostar el café), herramientas de madera (mortero y almirez, bandeja para servir el café) y tazas de café industriales. El uso de tazas de café realizadas en bambú, *tinjano* (*tinjaano*), y tazas de calabaza, *qulu* (*quluu*) constituyen dos elementos típicos de la cultura material utilizada por los Kafecho y Oromo de Jimma. En cambio, los Majangir utilizan cerámicas globulares para el *kari*: *kebet-karionk* (*kebet-kaarioonk*) y *kebet-sid'anonk* (*kebet-sidhaanoonk*), para hervir y destilar la infusión, y emplean tazas de cerámica conocidas como *mätägoy* (*matagooy)* para consumir la infusión. Es llamativo que el grupo que está más cercano a la caza-recolección (los Majangir) utilice elementos artificiales en el procesado y consumo del café, mientras que los Oromo y Kafecho recurran a elementos vegetales modificados (bambú y calabaza). En cambio, los Majangir usan un filtro de fibra vegetal tejida llamado *sote* (*sotee*) para filtrar el kari, y una cuchara de calabaza—*gote* (*gotee)*—para el destilado. La manera en que los Majangir actuales preparan y consumen *kari* y el carácter prístino de su tecnología

tradicional, así como la *chaîne opératoire* involucrada en el proceso de preparación de la infusión recuerda a las tradiciones de las primeras sociedades agricultoras. Prueba de ello es, por ejemplo, el hecho de que usen un filtro que es idéntico al que usan para fabricar cerveza. Parece que los Majangir aplican al contexto del café los procedimientos técnicos característicos de una bebida social más antigua.

La correcta preparación del café es considerada una cualidad importante para una buena mujer. Las relaciones de género construidas a través de la preparación y consumo de esta bebida reproducen un estatus subalterno para las mujeres, que deben servir a los hombres durante la ceremonia del café. El impacto social de su consumo es profundo, sea en su papel como cimentador de las relaciones de solidaridad entre vecinos o por sus valores rituales o en la creación de un sentido de alteridad y marginación del Otro, en relación a aquellos que están excluídos de la ceremonia del café y los grupos de consumo. Podemos decir que el consumo de café sirve para delimitar el grupo, quien pertenece y quien no (extranjeros, grupos marginados).Independientemente del valor económico del cultivo del café, el papel de la bebida en eventos de reconciliación, trabajos colectivos organizados durante el arado y la cosecha y las reuniones post-funerarias es de la mayor importancia entre los Kafecho, Majangir y Oromo.

Un elemento diferencial en la dimensión cultural del café entre los diversos grupos es hasta qué punto se utiliza en rituales. La llegada reciente del cristianismo llevó a la desaparición del papel de la planta del café y el *kari* en los rituales de los Majangir. En cambio Kafecho y Oromo, a pesar de la adopción del cristianismo y el Islam, han continuado utilizando el café en diferentes tipos de ritual. Esto se refleja en ritos cotidianos que acompañan a la ceremonia del café, así como ritos que tienen lugar en ocasiones especiales. *Coro* (*coroo*)*,* la práctica de moler café en el suelo, se considera una forma de dar gracias a la tierra por el café que produce y se lleva a cabo de forma habitual durante las ceremonias del café y como parte del *dejo* (*dejoo*)—ofrendas que se entregan a la tierra como expresión de respeto para la divinidad de la cosecha, *qollo* (*qolloo*). Entre los Oromo de Jimma, la ceremonia del café no solo implica rezos y bendiciones diarios, sino que también es un requisito en ocasiones especiales como una forma de apaciguar al creador (*waaqa*) y para pedirle perdón, buenas cosechas, salud y buen tiempo. Al mismo tiempo, la preparación y consumo de *bunä-qäla* (*buna-qalaa*)*,* café con cáscara recubierto de mantequilla y tostado, todavía desempeña un papel importante en las fiestas y ceremonias oromo. La tradición del *bunä-qäla*, preservada hasta la fecha, muestra quizá vínculos con un ethos pastoral e igualitario y las raíces de esta tradición podrían posiblemente retrotraerse al período anterior a la expansión oromo del siglo XVI. Teniendo enc uenta los datos etnoarqueológicos y el valor ritual del café entre los Kafecho y los Oromo, podría hipotetizarse que el motivo original tras la documentación de la planta, al contrario que los cultivos alimenticios, se habría debido a necesidades de tipo ritual.

Otra dimensión importante del valor del café, al menos en la actualidad, es el patrimonio. El café no es solo un elemento facilitador de relaciones socioculturales y una fuente de ingresos, sino que ha emergido también como un elemento clave patrimonial y un motivo de rivalidad étnica entre los Kafecho y los Oromo, que disputan sobre sus vínculos históricos a los orígenes y cultivo inicial de la planta. Diversas autoridades regionales han realizado esfuerzos de forma independiente para monumentalizar la planta, pero el lugar clave por su importancia simbólica es el Museo Nacional del Café en Kafa, que es testimonio de la entrada de la región en la modernidad global.

El consumo del café implica el uso de diferentes recipientes de cerámica realizados por alfareras. Como sucede en la mayor parte de las tierras altas de Etiopía, la cerámica entre los Kafecho, Majangir y Oromo es exclusivamente una tarea femenina. Entre los Kafecho y Oromo, las alfareras pertenecen a la capa más baja de la sociedad. Los hombres oromo raramente ayudan a las mujeres en la extracción de la materia prima o en la preparación de hoyos para cocer la cerámica. En Kafa, en cambio, el papel de los hombres en la producción de cerámica varía notablemente de unos clanes a otros. Así pues, los hombres mäniyo (Maniyoo) tienen un papel destacado en relación a los Mänjo (Manjoo) y Manno (Maannoo), dado que no solo colaboran en la extracción de la arcilla, sino que cuecen las vasijas, las transportan y las venden en el mercado. Las alfareras majang, al contrario que sus homólogas Kafecho y Oromo, viven en una sociedad igualitaria caracterizada por la ausencia de marginación por clase o clan. En cambio, los hombres majang tiene un papel prácticamente inexistente en la producción de cerámica más allá de su escasa participación en la excavación de hoyos, una tarea que no requiere un gran conocimiento experto o trabajo habitual.

Las ceramistas en el sudoeste de Etiopía producen cerámica a mano, secada al sol, cocida a baja temperatura para la preparación y consumo de café y *kari*. Las ceramistas seleccionan y explotan arcillas moldeables y las transportan usando sacos o cestas viejas originalmente empleadas en la cosecha del café. Todos los grupos, a excepción de las Majagir, preparan la pasta con una mezcla de desgrasante vegetal. Hay, por supuesto, diferencias técnicas evidentes en la preparación de la pasta. En este contexto, las Mänjo y Manno de Kafa y las alfareras oromo cerca de la ciudad de Agaro en la zona de Jimma utilizan un leño y una piedra plana para moler la arcilla y mezclarla con agua y paja. Las Maniyo de Kafa y las Yäma oromizadas de Jimma, en cambio, muelen la arcilla con un leño directamente sobre el suelo. En algunas comunidades oromizadas Y'äma se amasa la pasta con los pies, una técnica distintiva de este grupo. En cambio, las Majang emplean un leño para moler y alisar la arcilla sobre troncos de madera conocidos como *gonee.* Las alferaras Majang son las únicas artesanas que producen cerámica para café en objetos que se parecen a tornetas.

La disparidad existente entre las cadenas técnicas operativas en la producción de cerámica relacionada con el café y el *kari* se puede atribuir a las diferencias morfológicas entre cerámicas y técnicas aplicadas durante las distintas

fases de la producción. Las discrepancias análogas en el tiempo requerido para producir una vasija se pueden adscribir a dos factores fundamentales: el tamaño de la cerámica y la presencia o ausencia de motivos decorativos. Desde un punto de vista tipológico, la incisión es típica en las vasijas de café o *kari* producidas por las Kafecho, Oromo and Majang. La producción de cerámica para el café sin decorar no es desconocida entre las Mänjo y Manno de Kafa, pero las dos técnicas decorativas más habituales en zona oromo, las ondulaciones y las incisiones, las usan solo las Mäniyo de Kafa y las Yäma oromizadas en Jimma. De forma única, además, las alfareras Yäma oromizadas producen cafeteras con dobles asas y dobles picos vertedores con fines rituales. Por otro lado, la producción de cafeteras sin pico vertedor en el sudoeste y norte de Etiopía es, probablemente, debido a los contactos entre las llanuras sudanesas y los valles del Nilo y sus afluentes. De la misma manera, la decoración de ruleta en los vasos globulares de *kari* entre los Majangir puede ponerse en relación con la tradición de la Edad del Hierro documentada en Sudán del Sur y en Gambela. En esta última región, muy cerca de donde viven actualmente los Majang, el yacimiento de Ajilak ha proporcionado cerámica decorada por impresión de ruleta en un contexto datado por radiocarbono del 1000-1200 cal. d.C. Este tipo de decoración se halla ausente en grupos de las tierras altas de Etiopía, como los Oromo y Kafecho, y tiene que asociarse a comunidades de la familia nilótica durante los últimos dos milenios.

La cerámica relacionada con el café puede desecharse en áreas de actividad y en este proceso se convierte en desecho primario o puede transportarse fuera de las zonas de actividad con otros elementos y convertirse en desecho secundario. Una vez que una vasija relacionada con el café se rompe en contexto sistémico pierde su uso primario y su reutilización en un contexto secundario dependerá de la parte afectada durante la rotura y el estatus económico del conjunto doméstico. El estudio etnoarqueológico de la formación del registro arqueológico de las vasijas relacionadas con el café demuestra la presencia de un vínculo directo entre una diversidad de cerámicas utilizadas en la preparación y el consumo de café y la cantidad de desecho que puede recuperarse arqueológicamente. Los fragmentos de cerámica de vasijas relacionadas con el café aparecen en gran número en las aldeas de Majangir, Kafecho y Oromo. No parece que exista ningún tipo de patrón particular relacionado con cada grupo excepto en un caso: la alta tasa de rotura de las vasijas de *kari*, que se puede atribuir al estrés térmico causado por la escasa resistencia a este debido a la ausencia de desgrasante, la frecuencia de uso y las muchas horas que las cerámicas pasan hirviendo al día—tres o más rondas de bebida dos o tres veces al día.

Debido a las malas condiciones de preservación de los granos del café en los entornos abiertos y húmedos del sur de Etiopía, las posibilidades de encontrar pruebas tecnológicas que nos permitan conocer el comienzo del cultivo y el consumo del café dependen fundamentalmente de la posibilidad de encontrar semillas carbonizadas, así como en la investigación de basureros en yacimientos del sudoeste de Etiopía y las áreas inmediatamente al este del Valle del Rift.

Abstract

Coffea arabica, which still grows wild in the forests of the southwestern highlands of Ethiopia, is the oldest known species of coffee to be cultivated for its berries. The present thesis presents different traditions of coffee cultivation and consumption among people living in southwestern part of the country, the Kafecho, the Majangir and the Jimma Oromo. Historical accounts that provide first-hand information on the early cultivation and consumption of the plant in the southern half of Ethiopia are rare and the subject has received no archaeological examination. In addition, modernization, urbanization and access to industrial products, with the accompanying changes in the agricultural system have, in part, transformed ways of life of people in different parts of the country. This thesis, thus, intends to document methods in traditional coffee cultivation, the consumption of the beverage, and the *chaîne opératoires* involved in the production of coffee-related crafts before they disappear or are radically transformed. It does so from the point of view of ethnoarchaeology, that is, with an eye toward the analogical potential of such cultural practices to understand similar practices in the past. The study employed problem-oriented ethnoarchaeological research methods and archaeological techniques of recording sites, artifacts, structures and features. This involved, among other things, the mapping of compounds and activity areas and the documentation of material culture. Ethnographic methods were also used, such as household interviews and participant observation of the the technology and the socio-cultural contexts of production and consumption of the beverage. The four principal types of coffee production systems known in Ethiopia, forest-coffee, semi-forest coffee, garden- coffee and plantation-coffee, are found in the region. In relative terms, the degree of human involvement in the natural growth and reproduction of coffee is high in garden-coffee cultivation system and minimal in forest and semi-forest coffee cultivation systems. This investigation has thoroughly examined the different cultivation methods and has documented the tools employed in each stage of the cultivation process. Some of the traditional instruments, which are made entirely in wood, can be probably traced back to a time before agriculture or to the beginnings of agriculture. The thesis demonstrates that the social impact of coffee consumption is profound whether in reproducing gender roles, buttressing relations of solidarity between neighbors, or in creating a sense of otherness. We can say that coffee consumption serves to delimit the group, who belongs and who does not. The beverage is used in reconciliation rituals, communal works organized during the ploughing and harvesting seasons and during post-funeral gatherings. Coffee is also widely employed in religious rituals. Kafecho and Oromo, in particular, have continued to use coffee in different kinds of ceremonies. The thesis has also explored in detail the production of pottery associated to the preparation and consumption of coffee and its transferring to the archaeological context. Finally, the transformation of coffee into cultural heritage is studied. In sum, the study has generated theoretical and methodological insights into the onset of domestication and cultivation of the plant, and the cultural and environmental context in which artefactual evidence could be recovered archaeologically. The thesis has argued that the prime motive behind initial domestication of the plant, unlike other food crops, could be related to religious needs. This would be suggested by its important role in different rituals.

Resumen

Coffea arabica, que todavía crece salvaje en los bosques de las tierras altas del sudoeste de Etiopía, es la especie de café más antigua cultivada. La presente tesis presenta diferentes tradiciones de cultivo y consumo del café entre una serie de comunidades que viven en el sudoeste del país: los Kafecho, Majangir y Oromo de Jimma. Las narraciones históricas que proporcionan información de primera mano sobre los orígenes del cutivo y el consumo de la planta en el sur de Etiopía son escasos y el tema no ha recibido atención por parte de la arqueología. Además, la modernización, urbanización y acceso a productos industriales, con los consiguientes cambios en el sistema agrícola, han producido cambios en las formas de vida de la gente en diversas partes del país. Esta tesis, por lo tanto, pretende documentar los métodos de cultivo tradicional del café, el consumo de la bebida y las cadenas técnicas operativas involucradas en la producción de artesanías relacionadas con el café antes de que desaparezcan por completo o se vean transformadas radicalmente. El estudio se enfoca desde una perspectiva etnoarqueológica, esto es, con atención a la potencialidad analógica de tales prácticas culturales de cara a comprender prácticas semejantes en el pasado. El estudio ha empleado métodos y técnicas de investigación etnoarqueológicos y arqueológicos para registrar sitios, artefactos, estructuras y otros elementos. Esto ha implicado, entre otras cosas, el levantamiento planimétrico de conjuntos de habitación y áreas de actividad y la documentación de la cultura material. También se usaron métodos etnográficos, como entrevistas en espacios domésticos y la observación participante de la tecnología y los contextos socioculturales de producción y consumo de la bebida. En el sudoeste de Etiopía se documentan cuatro formas de cultivo: café de bosque, semibosque, huerto y plantación. Las tres primeras son tradicionales. En términos relativos, la participación humana en el crecimiento y reproducción del cafeto es elevada en el cultivo de huerto y mínimo en el de bosque y semibosque. La investigación ha examinado en detalle los diferentes métodos de cultivo y ha documentado las herramientas empleadas en cada fase del proceso de cultivo. Algunas de las herramientas, fabricadas íntegramente en madera, pueden retrotraerse probablemente a una época anterior a la agricultura o a los inicios de esta. La tesis demuestra que el impacto social del consumo del café es muy alto, sea en la reproducción de roles de género, reforzando las relaciones de solidaridad entre vecinos o creando un sentido de otredad. Se puede afirmar que el consumo del café sirve para delimitar el grupo, señalar quién pertenece y quién no. La bebida se utiliza en rituales de reconciliación, trabajos comunales organizados durante la temporada del arado y la cosecha, y en las celebraciones post-funerarias. El café también se emplea ampliamente entre los Kafecho y los Oromo en distintos tipos de rituales religiosos. La tesis también ha explorado pormenorizadamente la producción de cerámica asociada a la preparación y consumo de café y su transferencia al registro arqueológico. Finalmente, se analiza la transformación del café en patrimonio cultural. En conclusión, el estudio ha generado nuevas perspectivas teóricas y metodológicas sobre el origen de la domesticación y el cultivo de la planta y sobre el contexto cultural y ambiental en el cual se pueden encontrar pruebas materiales del cultivo y consumo mediante la arqueología. Se propone que la motivación principal detrás de

la domesticación inicial de la planta fue su utilización en contextos religiosos, lo cual vendría sugerido por el importante papel que tiene en diversos rituales.